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**SYSTEMS CONTROL TECHNOLOGY, INC.**

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AD-A220 505

**CORPS HELICOPTER ATTACK PLANNING SYSTEM  
(CHAPS)**

**POSITIONAL HANDBOOK**

INCLUDES:  
APPENDIX A, MESSAGES  
APPENDIX B, STATESPACE CONSTRUCTION  
SAMPLE SESSION

Prepared For:

Department of the Army  
Joint Tactical Fusion Program  
1500 Planning Research Drive  
McLean, VA 22102-5099

Contract Number:  
FC154688D0003

**SDTIC**  
**ELECTE**  
**APR 11 1990**  
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Prepared By:

Systems Control Technology, Inc.  
Mission Effectiveness Department

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CHAPS Project Manager

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90 04 10 065

## REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED			1b. RESTRICTIVE MARKINGS		
2a. SECURITY CLASSIFICATION AUTHORITY NA			3. DISTRIBUTION / AVAILABILITY OF REPORT UNLIMITED		
2b. DECLASSIFICATION / DOWNGRADING SCHEDULE NA			5. MONITORING ORGANIZATION REPORT NUMBER(S) NA		
4. PERFORMING ORGANIZATION REPORT NUMBER(S) NA			7a. NAME OF MONITORING ORGANIZATION HQ USAF/DIRECTORATE OF OPERATIONS ANALYSIS		
6a. NAME OF PERFORMING ORGANIZATION SYSTEMS CONTROL TECHNOLOGY, INC MISSION EFFECTIVENESS DEPARTMENT			6b. OFFICE SYMBOL (if applicable) JTF-PMO		
6c. ADDRESS (City, State, and ZIP Code) 2300 GENG ROAD PALO ALTO CA 94308-0888			7b. ADDRESS (City, State, and ZIP Code) HQ USAF/DOA APO NY 09094-5001		
8a. NAME OF FUNDING / SPONSORING ORGANIZATION DEPARTMENT OF THE ARMY		8b. OFFICE SYMBOL (if applicable) JTF-PMO		9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER FG154688D0003	
8c. ADDRESS (City, State, and ZIP Code) 1500 PLANNING RESEARCH DRIVE MCLEAN VA 22102-5099			10. SOURCE OF FUNDING NUMBERS PROGRAM ELEMENT NO. PROJECT NO. TASK NO. WORK UNIT ACCESSION NO.		
11. TITLE (Include Security Classification) CORPS HELICOPTER ATTACK PLANNING SYSTEM (CHAPS) POSITIONAL HANDBOOK (INCLUDES APPENDIX A AND B)					
12. PERSONAL AUTHOR(S)					
13a. TYPE OF REPORT FINAL		13b. TIME COVERED FROM 870915 TO 891001		14. DATE OF REPORT (Year, Month, Day) UNDATED	
15. PAGE COUNT 291					
16. SUPPLEMENTARY NOTATION <i>This</i>					
17. COSATI CODES FIELD GROUP SUB-GROUP 15 03 01 03 01			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number) AUTOMATED PLANNING SYSTEM		
19. ABSTRACT (Continue on reverse if necessary and identify by block number) This document was designed to provide the US Army CORPS helicopter planners with the necessary information to effectively use and operate the US Army's CORPS Helicopter Attack Planning System (CHAPS). There are five manuals for CHAPS. CHAPS was developed by Systems Control Technology, Inc, Palo Alto, CA for the Joint Tactical Fusion Program Management Office (JTFFMO). CHAPS is a derivative of USAF's Force Level Automated Planning System (FLAPS) and was extensively modified to incorporate US Army attack helicopters. The CHAPS program consists of two major stand-alone software programs: the SUPR program which defines a 3-D real-world statespace area where the helicopters would operate; and CHAPS which provides survivability estimates for attacking helicopters given a specific battlefield scenario and real-world threat. There are two volumes to the CHAPS Positional Handbook: Volume I contains the basic program operating instructions with Appendixes A and B; Volume II (Appendix C) contains the CHAPS data base specifications. <i>Keywords: mission. (KA)</i>					
20. DISTRIBUTION / AVAILABILITY OF ABSTRACT <input type="checkbox"/> UNCLASSIFIED/UNLIMITED <input checked="" type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS			21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED		
22a. NAME OF RESPONSIBLE INDIVIDUAL JACK L. WINGER			22b. TELEPHONE (Include Area Code) 496371-47-6911		22c. OFFICE SYMBOL HQ USAF/DOA

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## CHAPTER I

### GENERAL

#### I.1 PURPOSE OF THE POSITIONAL HANDBOOK

This document is the Positional Handbook for the CORPS Helicopter Attack Planning System (CHAPS). CHAPS was developed by Systems Control Technology, Inc. (SCT) for the Joint Tactical Fusion Program Management Office (JTFFMO) under contract F61546-88-D-0003 from the Force Level Automated Planning System (FLAPS). The objective of this Positional Handbook is to provide the users of CHAPS with the information necessary to effectively use the CHAPS system.

There are two volumes to the CHAPS Positional Handbook, Volumes I and II. Volume I contains the normal operating procedures for CHAPS and follows the format of applicable DOD regulations, with modifications agreed upon by SCT and JTFFMO. Volume II of the Users Manual contains the Data Base Specification and follows DOD Data Base Specification formats, without modification.

Three other CHAPS documents have also been prepared: a Training Course / Curriculum Outline, Instructor / Lesson Guides, and a Student's Training Course Guide. These documents are the foundation of the CHAPS training course, and are intended to complement this Positional Handbook.

The CHAPS system consists of two major stand-alone programs; the CHAPS program, and the SUPR program. These two programs have much in common and, in fact, share some of the same subroutines, data files and user interfaces. When referring to the entire CHAPS system, this manual uses the term the "CHAPS system." The individual programs are referred to as "CHAPS" or "SUPR".

## GENERAL

### I.2 PROJECT REFERENCES

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6. Systems Control Technology, "Force Level Automated Planning system (FLAPS) Version Release document Version 4.2," September 30, 1988, (UNCLASSIFIED).
7. Systems Control Technology, "CORPS Helicopter Attack Planning System (CHAPS) Curriculum Guide," January 17, 1989, (UNCLASSIFIED).
8. Systems Control Technology, "CORPS Helicopter Attack Planning System (CHAPS) Instructor/Lesson Guides," January 17, 1989, (UNCLASSIFIED).
9. Systems Control Technology, "CORPS Helicopter Attack Planning System (CHAPS) Student's Training Course Guide," January 17, 1989, (UNCLASSIFIED).

## GENERAL

### I.3 TERMS AND ABBREVIATIONS

AAA-----	Antiaircraft Artillery
AAFCE-----	Allied Air Forces - Central Europe
ACCESSIBLE NODE-----	A node which can be reached directly from another node.
ACCESSIBLE NODES BOX---	A rectangular area containing all of the nodes which can be reached from a given node. Used by the DPA when building arcs.
ACFT-----	Table containing performance information for attack and support aircraft.
ACO-----	Airspace Coordination Order
AGL-----	Altitude Above Ground Level
AI-----	Air Interdiction
AIRSTARS-----	Eifel data base containing unit status
ANCHOR POINT-----	Point where LLTR anchors on to the TNOD coordinate (or FEBA Access Node (FAN))
ARC-----	Path between two nodes
ATAF-----	Allied Tactical Air Forces
ATM-----	Air Tasking Messages
ATO-----	Air Tasking Order
ATOC-----	Allied Tactical Operations Center
BAI-----	Battlefield Air Interdiction
BAN-----	Base Access Node
BEARING INDICATOR POINT	Point chosen to indicate bearing of the cone of influence of an EC asset when drawing EC ROZ boxes. The bearing is from bearing indicator point to pivot point.
BEARING INDICATOR LINE-	A line extending from bearing indicator point to a pivot point when drawing EC ROZ boxes which indicate bearing of center of cone of EC influence of asset.
BYTE-----	Name of file containing byte-packed terrain elevation data.
CAB-----	Corps Aviation Brigade
CAS-----	Close Air Support
CHAPS-----	CORPS Helicopter Attack Planning System
CIJ-----	Close-in jammer (EC suppression)
COMPASS CALL-----	Airborne non-lethal electronic combat system
COOKIE-CUTTER TEMPLATE-	A circular uniform threat lethality model.
CONTOUR MAP-----	Graphic displays of terrain heights and danger. Lines are plotted to show

regions of equal value at set increments.

CORRIDOR----- A high probability-of-survival region created by applying threat suppression assets through which sorties will be routed.

CWG----- Conventional Weapons Guide

CWGPk----- Program to process CWG data

DANGER----- A quantitative representation of the threat to a penetrating aircraft at a location. Mathematically, the negative of the natural logarithm of the combined probability of survival per second multiplied by 100.

DCL----- DEC Command Language

DEC----- Digital Equipment Corporation

DIALOG AREA----- The part of the terminal screen where the users commands are entered and data and messages from FLAPS are displayed.

DMPI----- Designated Mean Point of Impact

DOAPK----- Program to process threat data

DOD----- Department of Defense

DPA----- Dynamic Programming Algorithm

DTED----- Digital Terrain Elevation Data

EC----- Electronic Combat

EF-111----- Designation of EC version of F-111 aircraft

EIFEL----- Computer network providing automated tactical command and control information.

ENTRY LLTR NODE----- The first LLTR node an aircraft will encounter upon leaving a staging base

ENVELOPE----- A region defining the maximum extent of a threat. Because of terrain masking and other factors, some areas of the envelope can contain no danger from that threat.

EVENT----- The numeration of points along a route where "something happened," such as a turn point or a change in threat status.

EW----- Electronic Warfare

EW/GCI----- Early Warning/Ground Control Intercept Radar

EXIT LLTR NODE----- The last LLTR node an aircraft will pass before crossing the FEBA

FAN----- FEBA Access Node

FEBA----- Forward Edge of Battle Area

FLAPS----- Force Level Automated Planning System Computer Program

FLOT----- Forward Line of Own Troops

FMBYTD----- Program to process DTED data

GCI----- Ground Control Intercept Area

GKS----- Graphical Kernel System

HQ----- Headquarters

ID----- Identification, in FLAPS, ID usually refers to the alphameric name of some data object.

IFF-----	Identification Friend or Foe
IFF-OFF-----	Line parallel to FLOT where IFF is turned off.
IFF-ON-----	Line parallel to FLOT where IFF is turned on.
INACTIVE LLTR NODE-----	An LLTR node which is not available for use during the current planning cycle. The ACO determines which LLTR nodes are on and which are off.
LEG-----	A segment of a route between consecutive turn points.
LLTR-----	Low Level Transit Route
LOCE-----	Limited Operational Capability Europe
MICROVAX II-----	32 bit computer on which the PAWS workstation is based.
MINIFIED-----	Digital map data which has been subsampled and compressed to allow a larger area of coverage to be displayed
M-ON-N-----	M units on N targets; where M and N = integers
NATO-----	North Atlantic Treaty Organization
NODE-----	Significant route points which are joined together by the FLAPS to form arcs and then routes. Specifically, they are bases, LLTR points, and targets, IFF-ON IFF-OFF, tanker tracks, and FANS.
NODE INDEX-----	A unique number corresponding to every active base, LLTR point, IFF-ON, IFF-OFF tanker track, FAN or target. They can be retrieved by showing the NLIS arrays.
OAS-----	Offensive Air Support (composed of BAI and CAS)
OCA-----	Offensive Counter Air
OO-----	Operations Order
PA-----	Probability of Arrival of Penetrating Aircraft
PAWS-----	Portable ASAS/ENSCE Work Station
PD-----	Probability of Destruction of Target
PIVOT POINT-----	Point which is the center of the leading edge of an EC ROZ box which is being defined.
PK-----	Probability of Kill of Penetrating Aircraft
POL-----	Petroleum, oil, lubricant
PS-----	Probability of Survival of Penetrating Aircraft
RCS-----	Radar Cross Section
ROZ-----	Restricted Operating Zone
SAM-----	Surface-to-Air Missile System
SASN-----	The array containing the current statespace.
SCALAR-----	A data structure containing only a single element.
SCENARIO SPACE-----	The entire geographical region under consideration during a FLAPS session.

SCL-----	Standard Conventional Load
SCT-----	Systems Control Technology, Inc.
SOJ-----	Stand-off jammer
STALE DATA-----	Data generated using input parameters or data bases that have since been modified. (For example, routes generated using the statespace before it was modified.)
STATESPACE-----	Eight-directional grid collapsed from two or 3-dimensional dangers. Used to determine cost of travel from one cell to another.
STATESPACE CELL-----	A geographic and altitudinal region in which the probability of surviving threats has been quantified.
STOCHASTIC THREAT-----	A mobile threat whose location is only approximately known with time
SUPR-----	A program in the FLAPS system that updates and processes threat data.
SWCH-----	A data construct which provides the FLAPS program with information about how it is currently configured.
TAF-----	Tactical Air Forces
TAC-----	Tactical Air Command
TERRAIN FOLLOWING-----	Air vehicle having constant clearance over terrain.
TERRAIN MASKING-----	Using the terrain to minimize danger.
TF-----	Terrain Following
THREAT MODEL-----	A data structure which contains generic information about a specific type of threat.
TOT-----	Time on Target
TREE-----	Optimum sequence of transit corridor nodes from each BAN to every other reachable corridor node and from each FAN to every other reachable transit node.
USAFE-----	United States Air Forces Europe
UTM-----	Universal Transverse Mercator
VAX-----	A line of 32 bit DEC computers
VECTOR-----	A data structure which contains many elements.
VMS-----	An operating system for VAX computers
WAYPOINT-----	A point on a route where one or more of the flight parameters change (for example, heading or altitude).
WILD WEASEL-----	Airborne Lethal Defense Suppression Weapons System
WFZ-----	Weapons Free Zone
X-OFF-----	Point where an LLTR intersects the IFF-OFF line.
X-ON-----	Point where an LLTR intersects the IFF-ON line.

#### I.4 SECURITY

The CHAPS software is unclassified. However, in the field, CHAPS can operate with classified data bases.



## CHAPTER II

### NORMAL OPERATING PROCEDURES

#### II.1 INTRODUCTION TO CHAPS

The primary function of CHAPS is to be a Corps level helicopter attack planning system. CHAPS performs feasibility assessment of potential routes before tasking is sent to the CABs. To accomplish this objective CHAPS has many capabilities. It automatically creates minimum risk routes through a threat area known as a statespace. These minimum risk routes take into account threats with uncertain location ( such as conventional arms ), known threats with terrain masking effects calculated from digitized terrain elevation data, and vehicle specific constraints such as fuel load and weapon load. CHAPS allows the user to display this data on a digital map background. CHAPS also allows the user to "manually" modify routes, and to suppress/eliminate individual threats and reroute based upon the changed threat lethality (statespace). The user can see a detailed analysis of the planned routes and can observe multiple route coordination.

CHAPS is a rapidly developed prototype system. It has a user-friendly mouse driven interface and displays its routes on a digital map background for easy reference. Potential unit to target taskings are predetermined to CHAPS operation and are input to the CHAPS system. Routing, without regard to finite detail, is performed in CHAPS and the potential routes and tasking are output. Fuel constraints on planned routes are noted when applicable.

CHAPS automatically creates minimum risk routes through a threat area known as a statespace. Relative threat lethality information is combined with intelligence on threat locations to create a statespace area through which minimum risk routing is performed. Terrain masking effects are calculated from Digitized Terrain Elevation Data and are taken into account when calculating statespace danger for threats with a known location. A multiple pass dynamic programming algorithm creates multiple routes through the statespace area.

CHAPS allows the user to modify individual routes. The user can add or delete waypoints or re-optimize routes along different paths. CHAPS shows the user the approximate fuel consumption figures, along with relative danger indicies for the leg just modified and for the entire route.

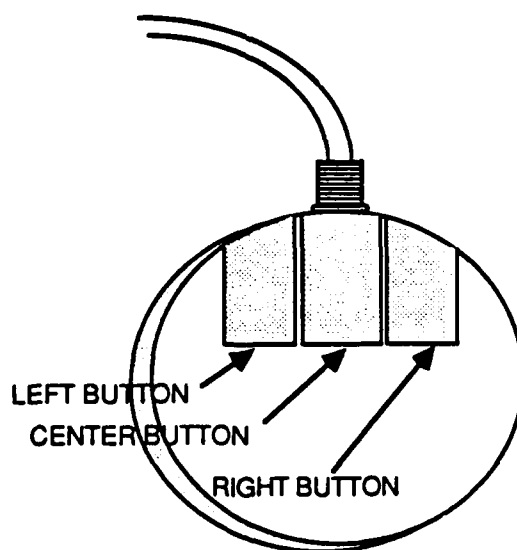
CHAPS allows the user to temporarily suppress/eliminate threats to determine the effects of coordinated fire support with the planned missions. CHAPS allows the user to specify the threat(s) for suppression. The user can then reroute the helicopters through the modified statespace.

CHAPS allows the user to see a detailed analysis of planned routes. The user can output to file the detailed leg by leg analysis of the route showing danger, distance, heading, total route danger, total route distance, and a list of all threats whose threat envelope overlaps the route.

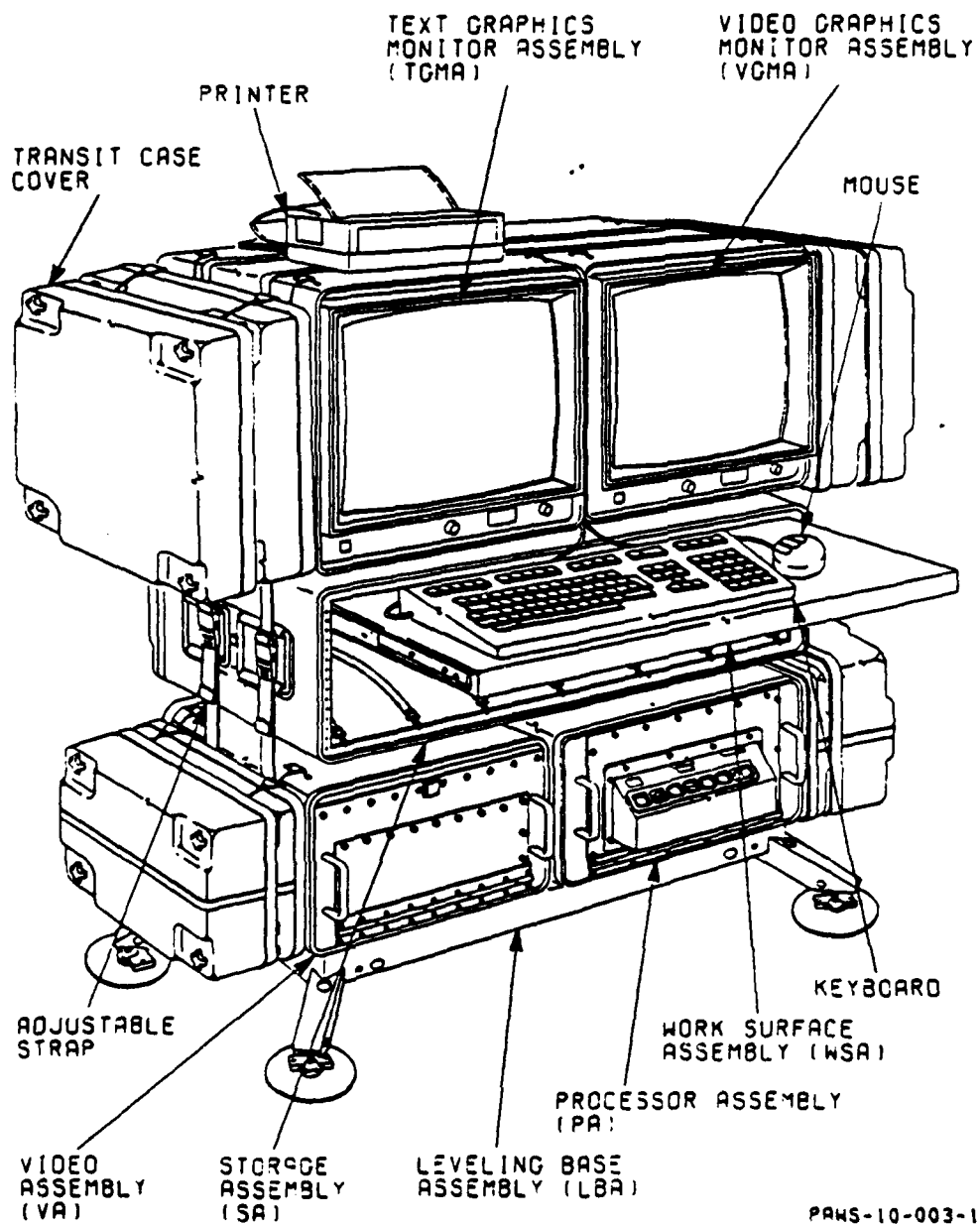
CHAPS allows the user to see multiple route, in-flight coordination. This option shows a time phased display of all the current created and modified routes. This capability allows the user to do enroute deconfliction.

## II.2 SYSTEM ENVIRONMENT

The PAWS system is a Microvax based graphics oriented computer workstation. It has two graphics monitors, a keyboard, two hard disk drives, a line printer, and a mouse. The PAWS mouse is used for all graphics inputs, and is the primary user input device. It has three buttons (Figure II.2-1), the left right, and center buttons, which may perform different functions. CHAPS uses the left button almost exclusively. When the user is directed to click on an option he should press the left mouse button, unless the documentation specifies a different button. Both the graphics monitors are used by CHAPS, the right hand monitor is referred to as the graphics or map screen (display); while the left monitor is referred to as the text display or screen. Most menus appear on the left monitor. Occasionally, the mouse control will shift to the right hand monitor, when the user needs it on the left monitor for menu input. When this occurs, press the f4 function key to switch the mouse control between monitors.



**Figure II.2-1 PAWS Mouse**



**Figure II.2-2 PAWS Workstation Configuration**

### II.2.1 Getting Started In CHAPS

CHAPS is run on a Microvax II based PAWS (Portable ASAS/ENSCE WorkStation) system. Standard VMS system commands are used to login and move to the appropriate subdirectories in which CHAPS may be run. Pop-up menus are graphics oriented and require the user to select options using the PAWS mouse. Text menus appear in a window on the text screen. They must be responded to via the keyboard. Text menus are used primarily for database and special functions.

### II.2.2 Logging In And Running CHAPS

To login to the system and run CHAPS, first boot up the system as directed in the PAWS documentation. When the text display turns blue, position the mouse at the place you would like to have the window on the text screen and depress the left mouse button. It is a good idea to position the window in the lower portion of the screen since CHAPS will primarily use the upper portion for pop-up menus. A small pop-up menu will appear - select "CREATE NEW VT220 WINDOW" from the menu by positioning the mouse arrow over the selection and clicking the left button. A login window will be created for you. At this point the user should enter the login account name and password. These will be provided for you.

To run CHAPS, enter the command provided to run CHAPS. You will see the message "READIN PREVIOUS FILES (Y/N)?" as CHAPS runs. Type 'Y' and hit <return>. Wait while the files are opened. When they have finished, you will see the Main Menu come up (Figure II.2-3). You are ready to begin issuing CHAPS commands. When you have finished using the program always exit using the exit command on the Main Menu, never use C (CTRL C) or Y (CTRL Y) to exit the program.

```
MAIN          :  SELECT COMMAND                                P. 1 OF 1
-----
F1--DATABASE   - DATA BASE COMMANDS                         F2--
F2--DISPLAY    - DISPLAY COMMAND                               F3--
F3--PLAN       - CREATE PLAN                                   F4--
F4--EIFEL      - EIFEL PROCESSING                             F5--
F5--SPECIAL    - SPECIAL PROGRAMMER OPTIONS                   F6--
F6--PENETRATE  - SELECT PENETRATION ALTITUDE                  F7--
-----
S1--HELP       :S2--NEXT PAGE           :S3--GO TO 1ST PAGE :S4--FIND A STRING
S5--GO TO PAGE :S6--GRAPHICS ON/OFF:S7--MAIN MENU           :S8--MENU BACK
-----
57
```

**Figure II.2-3 Main Text Menu**

### II.2.3 Using Pop-up Menus

To get the first pop-up menu, type the command S7 in at the Main Menu and hit <return>. You will see a pop-up Main Menu appear on the text screen (Figure II.2-4). All pop-up menus have a black title bar across the top with the name of the menu in it. The menu names can be used to reference menu documentation.

MAIN - - SELECT ONE
DATABASE DISPLAY PENETRATE PLAN EIFEL SPECIAL EXIT THIS MENU


**Figure II.2-4 Main Pop-Up Menu**

Select items from the pop-up menu by moving the mouse over the option you want to select and clicking the left button on the mouse. When the cursor is positioned over a menu item, the colors of the background and typing switch, causing a highlighting effect. When an option is selected, a pop-up menu usually disappears.

Pop-up menus can be moved. This can be important if the login window you created is underneath a pop-up window and you need to see it. To move a pop-up window, position the mouse on its title bar. Press and hold down the left button. While the button is still depressed, move the mouse to the position on the screen you would like to have the pop-up moved to and let go of the button. You will see the outline of the pop-up move across the screen as you do this and the menu will appear again when you release the button.

Pop-up menus can also have scroll bars (Figure II.2-5). Scroll bars make it easy to move through long menus. To use a scroll bar, position the cursor on the scroll bar in a place relative to where you want to be in the menu and click. For example, to get to 3/4 of the way through the menu, select a position along the scroll bar approximately 3/4 of the way down, and click.

Most pop-up menus will have the option "Exit" or "Exit this menu". Select this when you want to get out of a menu. Some menus have the option "OOPS". Select this option when you made a mistake getting to this menu.

DO REVIEW - - SELECT ONE	
JENA SAALFELD ARNSTAD GREIZ GERA ERFURT EXIT THIS MENU	

**Figure II.2-5 Menu With Scroll Bar**

#### II.2.4 Input Boxes

Similar in appearance to pop-up menus, input boxes require the user to type input from the keyboard. The user should type in the information requested in the format specified on the title bar of the input box. Be sure that you follow the format specifications exactly.

#### II.2.5 Text Menus

All interaction with a text menu is accomplished through the keyboard. To select an item from a text menu, either type the F abbreviation to the far left of the menu option, the menu key identifier directly to its right, or the two character abbreviation to the far right. To page through a text menu, the boilerplate options are used. The S2 option moves the user to the next page of the menu. S3 moves him back to the first page. It is not necessary to be on the same page of a menu to select items on a particular page, unless the function key abbreviations are being used. Otherwise type in the option name or two character abbreviation.

It is important to keep track of which windows are active during CHAPS operation. If the user does not interfere, the correct windows will always be active when needed by the program. Sometimes, however, the current active window must be changed. The user can always tell which text window is active by looking for the black cursor. If the program is looking for input from a pop-up menu, the menu will be onscreen, and the selections will highlight when the mouse cursor moves across the menu. If you have opened more than one text window on the workstation there will only be one active window at a time. The active window will have a solid black cursor in it. You cannot type information into a window that is not active. To change the active window, position the mouse somewhere in the window you want to be active and click the left button.

## II.2.6 Messages

Messages always appear in the text menu window, and may require a response from the user. Often the user is required to enter a carriage return. The message will explain what you are to do. If processing is taking a long time, and you are uncertain what is occurring always check the text window for a message which requests a response. Processing will not continue until messages which require a response have been answered. Messages are documented in the message section of this positional handbook.

In summary, CHAPS operates in a standard VMS, Microvax II based computer environment. It has pop-up menus which are operated through use of the mouse, and text menus which are operated through the keyboard. It has messages which are documented in this handbook.

## II.3 THE DATABASE MANAGER

The CHAPS database manager allows the user to change the database interactively. In order to use the the database manager it is necessary to understand the database structure. The database has a distinct structure, which can be compared to tabular information in a book. The database manager has six database manipulation functions, plus a report generator function.

The database manager is accessible solely through use of the text window menus. Using text window menus is described in section 2 of this chapter.

### II.3.1 Database Structure

The structure of the database can be compared to tables in a book, where pages are tables, lines are records, and columns are items (Figure II.3-1). Tables contain information about one basic thing. For example, the TGT table contains information about targets. Records in a table contain information about a specific thing. For example, the record TargetA in the TGT table contains information about Target A. Items contain the actual information. For example: the item X in the record TargetA in the TGT table contains the Latitude/Longitude of Target A. Some items are vector items, which means they contain more than one value. The number and type of weapons stored at a particular location would be an excellent example of vector items. Each item (number of weapons, weapon types) can have multiple values. In addition, these items are not only vector items, but parallel vector items which means the values have relevance to each other. The first value of weapon type describes the weapon type of the first value of the number of weapons. The exact items in each table are specified in this manual in Appendix C, The CHAPS Database Specification.

BASE IDENTIFIER	LATITUDE/ LONGITUDE	NUMBER OF WEAPON TYPES	WEAPONS TYPES	NUMBER OF WEAPONS
UPHA	51-56-16 N 001-15-30 W	6	APHID	120
			ATOLL	300
			KERRY	500
			KAREN	200
			KINGBOLT	100
			SAGGER	700
LAKE	52-24-19 N 000-33-01 W	4	KERRY	700
			ATOL	200
			KINGBOLT	100
			KELT	50

**Figure II.3-1 Database Structure Chart**

### II.3.2 Database Functions

The Database Manager has six database manipulation functions. They are:

1. **ADD** -- to add a new record of information to a table, specify the table to add to, the record identifier, and the data items for the record as they are requested by the program.
2. **DELETE** -- to delete a record or records of information from a table, specify the table and the record(s) to delete.
3. **CHANGE** -- to change data in a record or records, specify the table, record(s), item(s), and data to change to. All record items will be changed to the same provided value.
4. **COPY** -- to copy a record to another record, specify the table, the record to copy, and the identifier of the new record.
5. **SHOW** -- to show data from a table, specify the table, record(s) and item(s) to show.
6. **WRITE** -- to save data in an ascii text file on disk, specify the name of the file to output to, the table and record(s) to output. **WRITE** does not remove data from the database.

### II.3.3 The Report Generator

The Database Manager also contains a report generator which allows the user to output and create his own reports from the database. To show an already created report, select **REPORT** from the **DATABASE** menu, then select **SHOW**. The report will page down the screen. To continue looking at the report, hit a carriage return. To Quit from the report hit **Q**. To create or modify a report,



type in the report name, then respond to the menus as directed. The report generator allows the user to show items, specify test conditions on records to display based on item contents, modify headers, and sort on non-vector items.

In summary, the database manager allows the user to manipulate the contents of the database. To use the database manager it is important to understand the database structure which is specified in the positional handbook by table. The database manager also allows the user to create and output tabular format reports.

## II.4 DISPLAYS

CHAPS allows the user to display certain database items graphically to aid the user in mission planning. These displays are divided into two types of displays; graphic displays, which are brightly colored line or marker drawings, and map displays, which are variations of a digital map background on which the graphics displays are drawn. To bring up displays or to modify the current displays, select DISPLAY from the MAIN pop-up menu.

### II.4.1 Creating Graphics Displays

CHAPS has display options which allow the user to change the color graphics overlaying the map. Changes are made by toggling on or off selections on the menu and then selecting the DISPLAY option to update the graphics display. The graphics displays allow the user to toggle threat circles and id's, exposure, terrain and danger contours, currently planned routes, and other scenario features. The graphics display options are located on the DISPLAY menu which is selected from the MAIN menu. The graphics display options are:

1. SELECT THREATS -- may select all threats, select by type, or select individual threats. This option works in conjunction with CIRCLES, EXPOSURE, and THREAT IDS.
2. CIRCLES -- Toggles threat radius circles on or off. This option works in conjunction with the SELECT THRT option.
3. EXPOSURE -- Toggles terrain masked threat exposure contours on or off. This option works in conjunction with the SELECT THRT option.
4. THREAT IDS -- Toggles threat IDs on or off. This option works in conjunction with the SELECT THRT option.
5. DANGER -- Toggles threat danger contours on or off. The user must enter the terrain elevation levels he or she wishes to see.
6. PLAN -- Toggles the routes in the current plan on or off.
7. LEGEND -- Toggles legend on or off.
8. TERRAIN -- Toggles terrain contours on or off. The user must enter the terrain elevation levels he or she wishes to see.

9. FEATURES -- Toggles all features in the FEAT table on or off.
10. FLOT -- Toggles the IFF-ON, IFF-OFF, and FLOT on or off.
11. BASES -- Toggles base IDs on or off.
12. TARGETS -- Toggles target IDs on or off.

#### II.4.2 Updating Map Displays

CHAPS performs its functions on a digital map background for user reference and ease of use. The options described in this section change the digital map display. These options work independently from the graphics options. Selection of any of these options will cause the map to update immediately and any of the graphics options that have been toggled since the last time the DISPLAY option was selected will be forgotten. Always select DISPLAY after toggling graphics options to protect your selections from being lost. The map display options are:

1. Map scales -- Map scales available are 1:1M, 1:500k, 1:250k, 1:50k depending on location. To change the map to a desired map scale, click on desired map scale.
2. 0.5X, 0.75X, 1X, 2X, 3X options -- These options zoom to the specified magnification of the current map scale. The zoomed area is centered on current map.
3. SCENARIO -- This option puts up minified mosaic of 1:1M maps including the entire scenario area of interest. To display the entire scenario, click on the SCENARIO option.
4. MAGNIFY -- MAGNIFY creates a cursor area in which the digital map (at the current scale) is magnified. Clicking the left mouse button causes the whole screen to zoom to a 2X of the current map. Clicking the center mouse button causes the map to return to the normal 1X zoom. Clicking the right mouse button causes an exit from magnify. When the map is zoomed in magnify, the classification is shown over the cursor box, and the display and cursor roam over the entire map picture.
5. INTENSITY -- This option allows the user to change the map display intensity. You must select a number between 0.01 and 0.99 for the intensity level. It is a good idea to lower the map intensity to make the overlying graphics more visible.
6. JUMP TO -- This option allows the user to input a new latitude/longitude or UTM for the center of the map.
7. ROAM -- Roam allows the user to move the map slightly in one of eight directions: North, South, East, West, Northeast, Northwest, Southeast, and Southwest.
8. GRAY MAP -- Gray map toggles the map background between a color map and a gray tone map. It is useful for making the overlying graphics stand out.

9. SLIDE MAP -- Slide map allows the user to move the map by graphically selecting two points; the first point is the point to be moved, and the second point is where the user wants that point to appear on the display.
10. LOCATION -- Location allows the user to graphically select a point and then returns the latitude/longitude or UTM and the elevation of the point.

In summary, display is divided into two types of options; graphics displays and map functions. Map functions override graphics options, and graphics functions are updated whenever display is selected. The user may display threats, routes, terrain and scenario features, and may modify the map characteristics.

## II.5 PENETRATION ALTITUDE

A preliminary step in the development of the files used in the CHAPS program is the initial execution of the Statespace Update Program (SUPR). In SUPR, the user defines the AGL altitudes for planning missions. SUPR then builds a multi-altitude statespace, which, for each altitude, calculates and adds the danger attributed to each threat in the EOB. There is a maximum of seven altitudes. In CHAPS, the user must select one of these altitudes for the mission planning. After selection of this altitude, CHAPS automatically uses this altitude for generating routes, displaying threat circles and exposure, and displaying danger contours.

### II.5.1 Selecting A Penetration Altitude

In the Main menu, select PENETRATION. The defined altitudes will appear in another pop-up menu and the user can select a new altitude. This causes CHAPS to copy the danger in the selected altitude of the multi-altitude statespace into a single altitude statespace. In this document, the single altitude statespace is what is generically referred to as the 'statespace'.

### II.5.2 Penetration Altitude And Routing

CHAPS performs routing based upon the single altitude statespace ( or the generic reference 'statespace' ). If the user supresses threats, the statespace is modified. To return to the original statespace, or to select a new altitude, return to the Penetration menu via the Main menu.

## II.6 MINIMUM RISK ROUTING

To create minimum risk routes, the database must contain tasking consistent with its database. Once tasking has been entered, the ROUTE function in the Plan Options menu creates the minimum risk routes. To output routes, the user may select either the REVIEW option from the Plan Options menu. The route information goes to an ascii text file on the system.

### II.6.1 Tasking

Potential Tasking is presented in an input format which is read into the database and must be consistent with it. The user may modify the tasking file which is of the format illustrated in Figure II.6-1 to change which targets are being hit, and which units are being tasked. The DMPI table must contain the

DMPI's specified in the tasking file, and the TGT table must contain the geographic coordinates of the targets in the file. The AIRS table must contain the name of the units tasked, and a BASE table record must exist for the current location of each unit. The user should modify the database via the database manager so the tasking file and database are consistent with each other.

Once the two files are consistent, the tasking file must be read into CHAPS through the EIFEL option off the Main menu. From the Eifel menu select the READ ATO option. When the program returns, the database will have been updated with the current tasking.

## II.6.2 Routing

At this point the user may create minimum risk routes by selecting the ROUTE option from the Plan Options menu. Minimum risk route generation is automatic once this option is selected. When the program returns, routes can be displayed by selecting PLAN in the DISPLAY menu. It is a good idea to always save routes after creating or modifying them by selecting the SAVE option from the Plan Options menu.

## II.6.3 Route Output

To output routes use the REVIEW option. REVIEW is located in the Plan Options menu and outputs an ascii text file, which contains a detailed analysis of the route or routes selected by the user (Figure II.6-2). The analysis will be output to the system with the file name ANALYSIS.REP.

In summary, minimum risk routes are created automatically when the user selects the ROUTE option. Tasking must be input to the system before routes can be produced, and the tasking must be consistent with the database. Routes may be output either through the REVIEW option in the Plan Options menu.

## II.7 MANUALLY MODIFYING ROUTES

MANUAL allows the user to modify existing routes. In order to modify a route, the user must select the route to modify from a pop-up window. As the route is modified, MANUAL displays a route/leg summary in the CHAPS text window. In MANUAL, the user may select, delete or insert waypoints in the route, or reoptimize a route.

The MANUAL option is located in the Plan Options menu which is reached by selecting PLAN in the Main menu. Since MANUAL allows the user to modify routes, the user must select a route to modify from the Select Mission pop-up box. The user may also exit MANUAL from this menu. MANUAL options are selected by clicking on a command box on the graphics (map) screen. A textual route summary appears in the CHAPS text window as changes are made. It is important to remember to not zoom (2X or 3X option in DISPLAY) before entering MANUAL since if the display is zoomed, the graphics command boxes will not appear on the map display, and the user will be stuck in the program. Display the best map scale for the current routes in DISPLAY, then enter MANUAL

```

;
; NATO-UNCLASSIFIED
;
; ATO.DAT PAGE 1 08-00T-99 10:10
;
;
PPENDIX/CHARLIE/RECE//

ESOURCES/-//

NIT/LOCN/TYPAC/NR/SORTIES/DIV1/DIV2/NOTES//
RUE39/BRUE/OH-58D/20/30/-/-/-//
ORTISUM/30//
;
;
PPENDIX/DELTA/RECE//

NIT/MSNNR/OBJ/TGT/TOT/NLT/TYPAC/NR/SOL/NOTES//
RUE39/00LC301/36/RECE1/1800/1810/OH-58D/2/1PHOTO/1//
RUE39/00LC302/36/RECE2 /1800/1810/OH-58D/2/1PHOTO/1//
RUE39/00LC303/36/RECE3/1800/1810/OH-58D/2/1PHOTO/1//
ORTISUM/BRUE39/6//
ORTISUM/6//

;
OTES//

```

**Figure II.6-1 Tasking Input Form**

TIME	LATITUDE/LONGITUDE	ALT	HDB	MODE	DIST	DANGER
0.0	32U NA642595	50.0	076	BRVE	12.52	0.1878
0.0	32U NA867653	100.0	270	WAYPOINT	1.92	0.0289
1.0	32U NA832653	100.0	056	WAYPOINT	7.08	0.1719
4.5	32U NA940728	100.0	004	LN04 X-ON	7.08	0.2957
8.0	32U NA947859	100.0	045	WAYPOINT	2.82	0.2266
9.4	32U NA983897	100.0	090	WAYPOINT	5.94	5.9322
12.4	32U PA094899	100.0	056	WAYPOINT	7.16	0.6121
16.0	32U PA202975	100.0	045	WAYPOINT	8.44	0.5121
20.2	32U PB310089	100.0	090	WAYPOINT	4.94	0.2089
22.7	32U PB402091	100.0	045	WAYPOINT	2.81	0.1856
24.1	32U PB437129	100.0	090	WAYPOINT	4.93	0.2398
26.6	32U PB529132	100.0	073	WAYPOINT	6.77	0.2582
29.9	32U PB648173	100.0	253	SAALFELD	6.77	0.2682
33.3	32U PB529132	100.0	270	WAYPOINT	4.93	0.2398
35.8	32U PB437129	100.0	225	WAYPOINT	2.91	0.1956
37.2	32U PB402091	100.0	270	WAYPOINT	4.94	0.2089
39.7	32U PB310089	100.0	225	WAYPOINT	8.44	0.5121
43.9	32U PA202975	100.0	236	WAYPOINT	7.16	0.6121
47.5	32U PA094899	100.0	270	WAYPOINT	5.94	5.9322
50.4	32U NA983897	100.0	225	WAYPOINT	2.82	0.2266
51.8	32U NA947859	100.0	184	WAYPOINT	7.08	0.2957
55.4	32U NA940728	100.0	236	LN04 X-ON	7.08	0.1719
58.9	32U NA832653	100.0	090	WAYPOINT	1.92	0.0289
59.9	32U NA867653	50.0	256	WAYPOINT	12.52	0.1878
59.9	32U NA642595	50.0	256	BRVE	0.00	0.0000

TOTAL DISTANCE = 144.80 NM TOTAL DANGER = 17.7512

#### THREATS ENCOUNTERED BY MISSION

THREAT ID	MODEL ID	TYPE	LATITUDE/LONGITUDE	RANGE
A3A	SA-3	SAM	32U NB83303393	32.00
A1A	SA-11	IR	32U NB94102113	17.00
A3B	SA-3	SAM	32U NA99229898	32.00
A6A	SA-6	SAM	32U PA26579215	18.50
A01	SA-8	SAM	32U PA11318625	9.00
A8A	SA-8	SAM	32U NB96760450	9.00

**Figure II.6-2 Route Analysis**

### II.7.1 The Text Summary

A sample of the textual summary is shown in Figure II.7-1. Mission number, helicopter type, route section, and mode are displayed on first line of the summary. The second line of text is a summary of the leg previous to selected point (on ingress, the line to the friendly side of the route, on egress, the line to the hostile side of the route). The leg summary gives approximate fuel consumed, distance, danger and heading for the previous leg. The third line of the text summary provides total route figures for approximate fuel consumed, distance and danger. Instructions for the user are provided on the text screen for the operation selected from the graphics command boxes.

MISSION = 00LC303    OH-58D    INGRESS    MODE = COMMAND  
WP = 1    BRVE    32U NA64265952    TIME = 0000    REM FUEL = 940  
PREV LEG: FUEL USED = 000    DIST = 0.0    DANG = 0.0    HEAD = 0.0  
ROUTE TOTALS: FUEL USED = 635    DIST = 144.5    DANG = 158.4

TO CHOOSE AN OPTION:  
PLACE CROSSHAIRS IN COMMAND BOX & HIT A BUTTON ON MOUSE  
INGRESS PORTION OF ROUTE DISPLAYED

**Figure II.7-1    Manual Route Summary**

#### II.7.2    MANUAL Operations

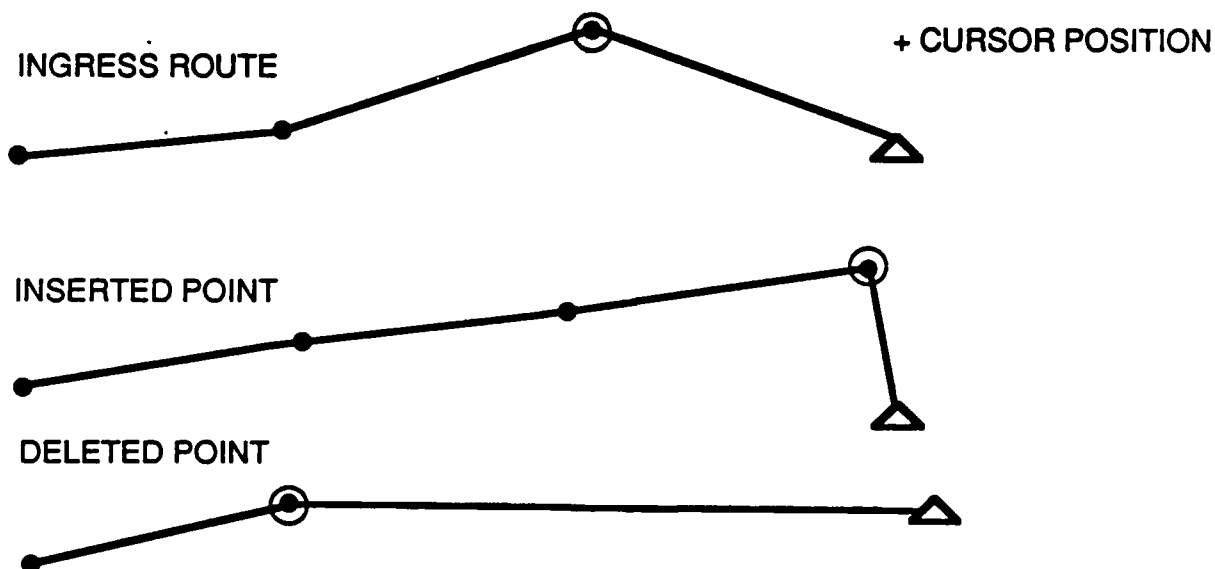
The entire MANUAL function revolves around the user interactions with the map display. The route manipulations revolve around the selected point which is indicated to the user by a yellow ring drawn around the current selected point on the map display. Only half of the users route (ingress or egress) is displayed at a time. The text display indicates which route half is currently displayed.

The command boxes control the operations of MANUAL These operations are:

1. SELECT -- SELECT changes the current selected point. To operate, click on the select command box, then on the point which is to become the new selected point.
2. INSERT -- This function inserts a waypoint after the selected point. To insert a point, click on the INSERT command box, then click on the map location where the new point is to be. (Figure II.7-1).
3. DELETE -- DELETE deletes the current selected point. To use, click on the DELETE command box to delete the selected point. The new selected point will be the next point in the route after the deleted point (Figure II.7-1).

4. OPT -- OPT optimizes from the end of fixed paths through the FEBA area. To optimize, click on the OPT command box, then in the general area to cross the FEBA. The program will select the closest fixed path across the FEBA to the cursor position, then optimize for minimum risk routes from the path to the target area.
5. INGRESS -- INGRESS changes the portion of the route being worked on to ingress. To use, click on the INGRESS box.
6. EGRESS -- EGRESS changes the portion of the route being worked on to egress. Click on the EGRESS box to change to egress.
7. FINISH -- FINISH exits MANUAL and saves the route changes. To finish, click on the FINISH box.
8. ABORT -- ABORT exits MANUAL without saving the changes made to the route. To discard changes, click on the ABORT box.
9. HELP -- HELP gives help on the command boxes. All help appears on the text screen. To get help, click on the HELP box.

If the user exits MANUAL and wants to retain the modifications, then save the modified routes by selecting the SAVE option from the Plan Options menu.



**Figure II.7-2 Insert and Delete Points**



## II.8 TIME PHASED DISPLAY

TIME PHASE allows the user to observe the relative positions of the helicopters at various points in time during the missions. TIME PHASE is located in the Plan Options menu and is operated through use of command boxes located on the graphics (map) display. A text display explaining the mission codes is provided in the text window.

TIME PHASE requires that the user provide a starting time and time increment which are in a pop-up box on the text display. To start the display type a carriage return in the text window. Always use the left mouse button to make selections from the command boxes.

### II.8.1 The Textual Summary

During TIME PHASE, a text screen display of information about the current picture is provided in the text window. The first line specifies start time, time increment, and current time (of the time display). Additional lines coordinate mission codes (on helicopter position symbols) to mission numbers.

### II.8.2 TIME PHASE Operations

There are six commands which can be issued once the user is in TIME PHASE. These commands are issued by clicking on the command box on the map display which corresponds to the command selected. It is very important that the user not zoom (2X, 3X options in display) before entering TIME PHASE. If the display is zoomed, the command boxes will not appear on the bottom of the map display, and the user will be stuck in TIME PHASE with no way to exit. Instead of zooming, select the best map scale for the area of interest, and ROAM or JUMP TO the desired centerpoint.

The commands available in TIME PHASE are:

1. ADVANCE -- moves the display forward in time from the current time by the current time increment. Click on the ADVANCE command box.
2. REVERSE -- moves the display backward in time from the current time by the current time increment. Click on the REVERSE command box.
3. START -- allows the user to change the start time and time increment for the time phased display. Click on the START command box.
4. INCREM -- allows the user to change the start time and time increment for the TIME PHASEd display. Click on the INCREMENT command box.
5. HELP -- provides on line help on TIME PHASE options. Click on the HELP command box. Help will be displayed on the text display.
6. ABORT -- exit from TIME PHASE. Click on the ABORT command box.

## II.9 THREAT SUPPRESSION IN CHAPS

In CHAPS, threats may be suppressed individually, which temporarily removes the danger associated with them from the statespace. The REROUTE option then recomputes the minimum risk routes through the suppressed statespace.

### II.9.1 Calculating Suppression Effects On The Statespace

It is possible to eliminate the effects of a single threat through use of the SUPPORT option in the Plan Options menu. It is recommended that the user know in advance which threat(s) he wants to suppress. To do this, the use of the display of threat circles and id's from the Display menu is recommended. To suppress a threat, select SUPPORT, then SELECT and enter the identifier of the threat to suppress. Multiple threats may be suppressed, however each must be selected individually. CHAPS can suppress threats with known or uncertain locations.

### II.9.2 Rerouting Based On Suppression

It is possible to show the effects of suppressing a threat on minimum risk routes. The user may not want to reroute based on threat suppression, so rerouting is performed only on command, not automatically. To reroute, select the REROUTE option off the Plan Options menu. The program will recalculate the routes, and will issue a series of messages which will appear in the text window. If desired, save the modified routes by selecting the SAVE option in the Plan Options menu before exiting the menu. To display the effects of suppression and rerouting, the user should enter Display from the Main menu and toggle the danger contours and plan off and on again. The new contours and routes will be displayed.

In summary, threats may be suppressed which temporarily removes their danger from the statespace area through use of the SUPPORT option. In addition, on command CHAPS will reroute based on the suppressed statespace.

## II.10 UPDATING THE STATESPACE

To update the statespace with current threat information, a stand alone program named SUPR (Statespace Update PProgram) has been developed. SUPR uses location information for threats which is pulled from a formatted ascii text file resident on the system, along with a file of threat capabilities by threat type to create the statespace. SUPR also culls old threat information out of the statespace based on the characteristics of the type of threat, and the time of last reporting. SUPR allows the user to cull data from the statespace based on time and/or type of threat. For a detailed example of how to update the statespace see Appendix B of this document.

### II.10.1 Threat Location Data

SUPR uses location information from a formatted ascii text file to update the statespace. The SIP (Statespace Interface Program) reformats files from a variety of automated threat reporting systems into the correct format for use with SUPR. If no source of automated data is available, threat information may be put into a file through use of an editor. The correct input format for SUPR is presented in this handbook. Threat information is read in by selecting the

LOCE option off the SUPR Main menu and providing the file name of the threat position file. Threat information is stored, but the statespace is only updated on command.

### II.10.2 Threat Processing

SUPR culls the statespace based on the location and time of last report of a threat. Threat characteristics are used in combination with the last report time and location (as indicated in the threat position file) to determine if reprocessing a particular threat is required. Threats which have had no report since 2 times their threat 'types' dwell time are deleted from the statespace. Threats which have been reported, but which have moved outside the associated uncertainty ellipse of the threat are moved from their current position, to their new location. Threats which have not moved outside their uncertainty ellipses are not moved, but have their time of last siting updated. Actual statespace updating is performed when the UPDATE option on the SUPR MAIN menu is selected.

### II.10.3 Purging The Statespace

The PURGE option allows the user to remove certain threat information from the statespace. The user may purge by threat type by selecting the type of threat to purge, and the WHENEVER time option. It is also possible to purge by time of last reporting by selecting the ALL threat types option and then specifying the time to purge from. To purge by threat and time specify both the type and time to purge on.

SUPR allows the user to read in an ascii text file of threat locations, and create or modify the statespace based on that input data.

## CHAPTER III

### MENUS

### III.0.1 ACCESSIBLES MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The ACCESSIBLES Menu allows the user to select from one or more LLTR's which are accessible to an already selected target. A list of the LLTR's accessible to the given target is displayed. An asterisk will appear beside every record that is selected. This is a toggle menu. Selections may be toggled on or off by entering the selection again.

#### OPTIONS

(option)	(abbrev)
DONE	/
ALL	AL
CLEAR	CL
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

DONE - Allows the user to complete the selection of records and proceed to showing the arcs. When this option is selected, the arcs from the chosen LLTR's to the given target will be displayed.

ALL - Allows the user to select all LLTR's accessible to the target. An asterisk will appear beside all the records. Any record that has been selected may be un-selected by selecting it again.

CLEAR - Allows the user to clear off all selections made so far. The user may now start with a clean slate.

(VARIABLE OPTIONS) - As Required

#### PROMPT

- The key abbreviations for this menu (appearing in parentheses in far righthand section of the menu) represent record numbers for the nodes in a table. To select a range of nodes, you may enter <record NO 1>:<record NO 2> for a range of nodes between record 1 and record 2 inclusive. Example: to select records 2 through 11 enter 2:11.

### III.0.2 ADD SCALAR MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The ADD SCALAR Menu allows the user to add a value for a scalar type item of the selected table. The table name and the item name are displayed on the menu. The data type (character, integer or real) of the item is also displayed. The higher level menu is the Table Add Menu.

#### OPTIONS

(option)	(abbv)
DONE	/

#### OPTION DESCRIPTION

DONE - Allows the user to enter zeros or blanks (depending on the type of item) for the remaining items of the table and write the record to the table. Selecting this option returns to the higher level menu, the Table Add Menu.

#### PROMPT

- The user may enter a value for the item specified in the menu. The form for the item should be consistent with the item type displayed in the menu and should be in the format illustrated in the bottom line of the menu. When a value is entered, either the Add Scalar or Add Vector Menu will be displayed until all items in the table have been entered. When all items have been added, the Table Add Menu will be displayed.

### III.0.3 ADD VECTOR MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The ADD VECTOR Menu allows the user to enter a value for a vector item of a selected table. The table name and the item name are displayed on the menu. The data type (character, integer or real) of the item is displayed as is the subscript of the vector. This menu is redisplayed until all the items have been entered or the ZERO option has been selected. The higher level menu is the Table Add Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/
SUBSCRIPT	SU
ZERO	ZE

#### OPTION DESCRIPTION

DONE - Allows the user to enter zeros or blanks (depending on the type of item) for the remaining items of the table and write the record to the table. Selecting this option returns to the higher level menu, the Table Add Menu.

SUBSCRIPT - Allows the user to select a different subscript than the current one. When vector items are passed over by use of the subscript option, they are filled with zeros or blanks depending on item type. When this option is selected, the Subscript Menu is displayed.

ZERO - Allows the user to enter zeros or blanks (depending upon data type) to the rest of the subscripts for the current item.

#### PROMPT

- The user may enter a value for the item specified in the menu. The form of the item should be consistent with the item type displayed in the menu and should be in the format displayed in the bottom line of the menu. When a value is entered, either the Add Scalar or Add Vector Menu will be displayed until all items in the table have been entered. When all items have been added, the Table Add Menu will be displayed.

### III.0.4 ATM UNIT MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The ATM UNIT Menu allows the user to select the accepted PLAN table record he or she would like to see the ATM for. The higher level menu is the Output File Menu.

#### OPTIONS

(VARIABLE OPTIONS)

#### OPTION DESCRIPTION

(VARIABLE OPTIONS) - As Required



### III.0.5 CHANGE ITEM MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The CHANGE ITEM Menu allows the user to select the items that will be changed in the already selected record/s of an already selected table. The user may select any or all the items from the list of items that is displayed. An asterisk appears beside each item that has been selected. The DONE option must be entered to indicate that the user has finished selecting items to change. The higher level menu is the Record Change Menu.

#### OPTIONS

(option)	(abbv)
DONE	/
ALL	AL
CLEAR	CL

(VARIABLE OPTIONS)

#### OPTION DESCRIPTION

DONE - Allows the user to tell CHAPS or SUPR that selecting items of the record from the table is complete. When this option is selected, depending upon the type of the first item to be changed, the Change Scalar or the Change Vector Menu is displayed.

ALL - Allows the user to select all the items of the already selected table. An asterisk will appear beside all items. Any item that has been selected may be un-selected by selecting it again.

CLEAR - Allows the user to clear any selection made so far and start selecting items again. If there was an asterisk beside any of the items, it will disappear when this option is selected.

(VARIABLE OPTIONS) - As Required

### III.0.6 CHANGE SCALAR MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The CHANGE SCALAR Menu allows the user to change a value for a scalar item of a selected table. The table name and the item name is displayed on the menu. The data type (character, integer, real etc.) of the item is also displayed. The higher level menu is the Record Change Menu.

#### OPTIONS

(option)	(abbv)
DEFAULT	.

#### OPTION DESCRIPTION

DEFAULT - Allows the user to use the default value displayed for the selected item. When this option is selected, depending upon the type of the next item to be changed, the Change Scalar or the Change Vector Menu is displayed.

#### PROMPT

- The user may enter a value for the item specified in the menu. The form for the item should be consistent with the item type displayed in the menu and should be in the format displayed in the bottom line of the menu. When a value is entered, either the Change Scalar or Change Vector Menu will be displayed until all items in the table have been entered. When all items have been changed, the Table Change Menu will be displayed.

### III.0.7 CHANGE VECTOR MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The CHANGE VECTOR Menu allows the user to change a value for a vector item of a selected table. The table name and the item name is displayed on the menu. The data type (character, integer, real etc.) of the item is also displayed. The subscript of the vector now being changed is shown. This menu is redisplayed until values for each subscript have been entered. The higher level menu is the Record Change Menu.

#### OPTIONS

(option)	(abbv)
DEFAULT	.
SUBSCRIPT	SU
DONE	/

#### OPTION DESCRIPTION

DEFAULT - Allows the user to use the default value displayed for the selected item. When this option is selected, the Change Vector Menu is re-displayed if there are more subscripts in the vector item that have to be changed. If all the subscripts have been changed, depending upon the type of the next item to be changed, the Change Scalar or the Change Vector Menu is displayed.

SUBSCRIPT - Allows the user to select a different subscript than the current one. When this option is selected, the Subscript Menu is displayed.

DONE - Allows the user to proceed to the next selected item. Vector subscript items which are not specifically changed retain their previous values.

#### PROMPT

- The user may enter a value for the item specified in the menu. The form for the item should be consistent with the item type displayed in the menu and should be in the format displayed in the bottom line of the menu. When the user enters a new value for a character item containing blanks, he or she must enclose the value in double quotes unless the item is a twenty four character description. When a value is entered, either the Change Scalar or Change Vector Menu will be displayed until all items in the table have been entered. When all items have been changed, the Table Change Menu will be displayed.

### III.0.8 COPY LABEL MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The COPY LABEL Menu allows the user to specify a unique ID label for the record that will be created using the Copy command of the Data Base Menu. ID label must be a unique name in the table. The newly created record may be addressed by this label. The higher level menu is the Record Copy Menu.

#### PROMPT

- The ID label must be a unique label in the table. When the label is entered, the program returns to the Record Copy Menu.

### III.0.9 DATA BASE MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The DATA BASE Menu allows the user to add, delete, change, copy records, create and modify a report and show selected or predefined parts of the database. In addition, this menu enables the user to find (with the aid of the cursor) the ID of an object in the display or to find the location of a point. The higher level menu is the Main Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/
ADD	AD
DELETE	DE
CHANGE	CH
COPY	CO
SHOW	SH
REPORT	RE
WRITE	WR

#### OPTION DESCRIPTION

DONE - Allows the user to complete database operations. The CHAPS Main Menu is displayed.

ADD - Allows the user to add a record to a table. The user is prompted to choose the table in which he or she wishes to add a record. When the ADD option is selected, the Table Add Menu is displayed.

DELETE - Allows the user to delete a record from a table. The user is prompted to choose the table from which he or she wishes to delete a record. When the DELETE option is selected, the Table Delete Menu is displayed.

CHANGE - Allows the user to change a record in a table. The user is prompted to choose the table in which he or she wishes to change a record. This option performs the same function as a DELETE plus an ADD command. When the CHANGE option is selected, the Table Change Menu is displayed.

COPY - Allows the user to copy one record from a table to a new record in the same table. The user is prompted to enter the name of the table he or she wishes to copy the record from. All information in the new record, except for the ID label will be identical to the old record. This command is useful for adding a record in a table that is to be identical or similar to another record in the same table. When the COPY option is selected, the Table Copy Menu is displayed.

SHOW - Allows the user to show records of a table, or the contents of certain arrays, or an ATO, ATM or TABOO report. The user is prompted to enter the name of the object he or she wishes to show. When the SHOW option is selected, the Show Menu is displayed.

REPORT - Allows the user to create, modify or show a report. The user may create a report in which the tables and items are defined by the user. When the report option is selected, the Report Menu is displayed.

WRITE - Allows the user to write selected records from selected tables to an output file. The output file is a formatted sequential file, which may be edited, printed, etc. The file is in the proper format for a command file which may be used to re-load the database. When the WRITE option is selected, the Output File Menu is displayed.

### III.0.10 DEBUG LEVEL MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The DEBUG Menu allows the user to set an internal program variable which determines how much debug output is produced by the program. Planners need not use this command, since the initialization command file will set the debug level to an appropriate level such as 2 for the user. The higher level menu is the Special Menu.

#### OPTIONS

(option)	(abbv)
LEVEL 0	0
LEVEL 1	1
LEVEL 2	2
LEVEL 3	3
LEVEL 4	4
LEVEL 5	5
LEVEL 6	6
LEVEL 7	7
LEVEL 8	8
LEVEL 9	9

#### OPTION DESCRIPTION

- 0 - Debug level OF 0 will produce no debug output.
- 1 - Debug level of 1 will produce only the elapsed CPU time and wall clock time associated with each command as the debug output.
- 2 - Debug level of 2 will produce a debug output little bit more than the debug level 1.
- 3 - Debug level of 3 will produce a debug output little bit more than the debug level 2.
- 4 - Debug level of 4 is useful for programmers.
- 5 - Debug level of 5 is GOOD FOR WORDY PEOPLE.
- 6 - Debug level of 6 is GOOD FOR DEBUGGING.
- 7 - Debug level of 7 is GOOD FOR UNREASONABLE PROGRAMMERS.
- 8 - Debug level of 8 is GOOD BUT MUCH MORE THAN ANYONE NEEDS.

9 - Debug level of 9 is VERY LARGE.



### III.0.11 DIROAM MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The DIROAM menu allows the user to input a direction in which to move the map. The higher level menu is the Display Menu.

#### OPTIONS

(option)	(abbv)
NORTH-WEST	NW
NORTH	NO
NORTH-EAST	NE
WEST	WE
EXIT	EX
EAST	EA
SOUTH-WEST	SW
SOUTH	SO
SOUTH-EAST	SE

#### OPTION DESCRIPTION

NORTH-WEST - Roam to the NORTH-WEST

NORTH - Roam to the NORTH.

NORTH-EAST - Roam to the NORTH-EAST.

WEST - Roam to the WEST.

EXIT - Exit the menu to the Display Menu.

EAST - Roam to the EAST.

SOUTH-WEST - Roam to the SOUTH-WEST.

SOUTH - Roam to the SOUTH.

SOUTH-EAST - Roam to the SOUTH-EAST.

### III.0.12 DISPLAY MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The Display Menu can be divided into two sections. Options that affect the graphic overlays and options that affect the map itself. Graphics options allow the user to change the color graphics overlaying the map. Changes are made by toggling on or off selections on the menu and then selecting the DISPLAY option to update the graphics display. Options that are toggled on are highlighted. Map options affect the underlying map. These options work independently from the graphics options. Selection of any of these options will cause the map to update immediately and any of the graphics options that have been toggled since the last time the DISPLAY option was selected will be forgotten. Always select DISPLAY after toggling graphics options to protect your selections from being lost. The higher level menu is the Main Menu.

#### OPTIONS

(option)	(abbv)
DISPLAY	DI
FEATURES	FE
LEGEND	LE
FLOT	FL
SELECT THRT	ST
DANGER	DA
CIRCLES	CI
TERRAIN	TE
EXPOSURE	EX
BASES	BA
THREATS	TH
TGT	TA
PLAN	PL
0.5 X ZOOM	SC
SCENARIO	SC
0.75X ZOOM	SC
1M MAP	SC
1X ZOOM	SC
500K MAP	SC
2X ZOOM	SC
250K MAP	SC
3X ZOOM	SC
50K MAP	SC
INTENSITY	SC
GRAY MAP	SC
JUMP TO	SC
SLIDE MAP	SC
ROAM	SC
MAGNIFY	SC
LOCATION	SC

## OPTION DESCRIPTION

DISPLAY - Updates the graphics, incorporating all graphics options toggled on or off since the last time DISPLAY was selected.

FEATURES - Toggles features on or off.

LEGEND - Toggles the legend on or off.

FLOT - Toggles the FLOT, IFF-ON, and IFF-OFF lines on or off.

SELECT THRT - Allows the user to select the threats that will be displayed when CIRCLES, EXPOSURE, or THREATS are selected. The Select Thrt Menu will be displayed for the user to select from. After selecting threats, select the DISPLAY option to update the graphics.

DANGER - Toggles threat danger contours on or off. You must enter the number of danger contour levels you wish to see and the value for each of those levels. The range for these levels is between 0.0 and 1.0, not inclusive.

CIRCLES - Toggles threat radius circles on or off. This option works in conjunction with the SELECT THRT option. You must have selected threats BEFORE toggling on the CIRCLES option.

TERRAIN - Toggles terrain contours on or off. You must enter the number of terrain contour levels you wish to see and the elevation in feet for each of those levels. The formats for these numbers must be XXX., the decimal point must be included. Terrain contours will only be displayed on a 1:50K or 1:250K map. This option can take a significant amount of time to display.

EXPOSURE - Toggles terrain masked threat exposure contours on or off. This option works in conjunction with the SELECT THRT option. You must have selected threats BEFORE toggling on the EXPOSURE option.

BASES - Toggles base ID's on or off.

THREATS - Toggles threat ID's on or off.

TGT - Toggles target ID's on or off.

PLAN - Toggles the routes in the plan on or off.

0.5 X ZOOM - Displays a minified map, where minify means the digital map data has been subsampled and compressed to display more data on the monitor. This option is highlighted if it is currently selected.

SCENARIO - Change the map scale to the default scenario scale, currently set to 1:1,000,000, and set the edges of the map to the scenario boundaries as defined in the ALGP file. This option is highlighted if it is currently selected.

0.75X ZOOM - Displays a minified map, where minify means the digital map data has been subsampled and compressed to display more data on the monitor. This option is highlighted if it is currently selected.

1M MAP - Changes the map scale to 1:1,000,000. This option is highlighted if it is currently selected.

1 X ZOOM - Displays map at normal size. This option is highlighted if it is currently selected.

500K MAP - Changes the map scale to 1:500,000. This option is highlighted if it is currently selected.

2 X ZOOM - Displays map at twice normal size. This option is highlighted if it is currently selected.

250K MAP - Changes the map scale to 1:250,000. This option is highlighted if it is currently selected.

3 X ZOOM - Displays map at three times normal size. This option is highlighted if it is currently selected.

50K MAP - Changes the map scale to 1:50,000. This option is highlighted if it is currently selected.

INTENSITY - Allows the user to change the map display intensity. You must select a number between 0.01 and 0.99 for the intensity level. It is a good idea to lower the map intensity to make the overlying graphics more visible.

GRAY MAP - Toggles the map background between color and graytone.

JUMP TO - Allows the user to input a new latitude and longitude or UTM for the center of the map.

SLIDE MAP - Allows the user to move the map by selecting two points; the first point is the point to slide, and the second point is where the user wants the first point to be displayed.

ROAM - Allows the user to move the map slightly in one of eight directions. The DIROAM Menu is issued for the user to select a direction from.

MAGNIFY - Displays a magnifying 'lens' over the map. The 'lens' can be moved with the mouse. Clicking the left button on the mouse does a 2X zoom. Clicking the center button returns you to the original scale. Clicking the right button will return you to the display menu with the original scale displayed.

LOCATION - Allows the user to graphically select a point on the map and returns the lat/lon or UTM and the elevation of the point.

### III.0.13 DO REVIEW MENU

#### PROGRAM(S)

CHAPS

#### PURPOSE AND OVERVIEW

The Do Review menu allows the user to select which missions to perform detailed analysis on and output the results to a file on the system named ANALYSIS.REP. The analysis gives a leg by leg breakdown on danger, distance, heading, and fuel consumption, and provides a list of threat envelopes encountered by the selected route(s). Select a route or routes and select DONE to perform the analysis and output the file. The higher level menu is the Plan Options Menu.

#### OPTIONS

(option)	(abbv)
DONE	DO

#### OPTION DESCRIPTION

DONE - Selecting done causes the program to perform a detailed route analysis on the selected missions, and to output the analysis to the system in a file named ANALYSIS.REP.

### III.0.14 ECHO MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The ECHO Menu allows the user to specify if he or she wishes to see each command that is being read from the command file the user has selected. The higher level menu is the Input File Menu.

#### OPTIONS

(option)	(abbrev)
YEP	Y
NOPE	N

#### OPTION DESCRIPTION

YEP - Allows the user to see each command, on the terminal as it is being read, from the user specified command file. After the file has been read in, the program will leave the user in whatever menu the command file has ended in, or in the Special Menu.

NOPE - Bypass the echoing of each command, on the terminal as it is being read, from the user specified command file. After the file has been read in, the program will leave the user in whatever menu the command file has ended in, or in the Special Menu.

### III.0.15 EIFEL MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The EIFEL Menu allows the user to do any type of processing associated with the ATO, ACO, OO and HOLDINGS reports. The higher level menu is the Main Menu.

#### OPTIONS

(option)	(abbv)
CREATE ACO	CACO
PROCESS ACO	PACO
PROCESS AIRS	PAIR
PROCESS OO	POO
PROCESS ATO	PATO
WRITE ATO	WATO
WRITE ATM	WATM
READ	RE

#### OPTION DESCRIPTION

CREATE ACO - Allows the user to interactively create an ACO file of the format acceptable to the ACO processor. When the CREATE ACO option is selected, the Create Record Menu is displayed.

PROCESS ACO - Allows the user to process an input file containing the Air Coordination Order from EIFEL into a command file which can be read into CHAPS on a subsequent execution of the program. When the PROCESS ACO option is selected, the Input File Menu is displayed.

PROCESS AIRS - Allows the user to process an input file containing the AIRSTAR information from EIFEL into a command file which can be read into CHAPS on a subsequent execution of the program. When the PROCESS AIRS option is selected, the Input File Menu is displayed.

PROCESS OO - Allows the user to process an input file containing the Operations Order from EIFEL into a command file which can be read into CHAPS on a subsequent execution of the program. When the PROCESS OO option is selected, the Input File Menu is displayed.

PROCESS ATO - Allows the user to process an input file containing the Air Taskings Order from EIFEL into a command file which can be read into CHAPS on a subsequent execution of the program. When the PROCESS ATO option is selected, the Input File Menu is displayed.

WRITE ATO - Allows the user to write the ATO report to the terminal and select a file the report will be written to. When this option is selected, the Output File Menu is displayed.

WRITE ATM - Allows the user to write the ATM report to the terminal and select a file the report will be written to. When this option is selected, the Output File Menu is displayed.

READ - Allows the user to read a command file. The user is prompted for the name of the file and whether he or she wishes the commands being read from the command file be echoed on the screen. When the READ option is selected, the Input File Menu is displayed.



### III.0.16 INPUT FILE MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The INPUT FILE Menu allows the user to select a filename for an input file according to the following cases:

#### CASE HIGHER LEVEL MENU NEXT ACTION

	----- Command
Input Special Menu The Echo menu is displayed Eifel Input Main Menu Output File	
Menu is displayed Loce File Supr Main Menu Loce Preprocessor executes	

#### OPTIONS

(option)	(abbrev)
DEFAULT	.

#### OPTION DESCRIPTION

DEFAULT - Allows the user to select the default filename for the input file.

#### PROMPT

- To enter a file name other than the default file, the format is AAAAAA.AAA. The first character must be a letter of the alphabet. The name will be 1 to 6 characters long with a 3 character extension. Example : to name a file MYFILE with an extension of DAT the valid entry would be MYFILE.DAT.

### III.0.17 LATLON VALUE MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The LATLON VALUE Menu allows the user to enter a co-ordinate in any of 4 formats, and see the co-ordinate in the other 3 formats. The higher level menu is the Special or Supr Special Menu.

#### OPTIONS

(option)	(abbv)
DONE	/

#### OPTION DESCRIPTION

DONE - Allows the user to indicate that he or she is done converting co-ordinates. When this option is selected, the Special or Supr Special Menu is displayed.

#### PROMPT

1) An optional UTM zone and a 6,8 or 10 character UTM coordinate. The UTM zone defaults to 31U,32U or 33U, depending on the UTM coord.

2) Latitude/longitude in degrees, minutes, optional seconds, optional tenths or seconds and hemisphere.

3) Decimal latitude/longitude with a minus sign used for South latitude or West longitude.

4) Latitude/longitude in degrees, minutes, hundredths of minutes and hemisphere.

### III.0.18 LOWER BOUND MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The LOWER BOUND Menu allows the user to input bounds on an item he or she wishes to test against a range of values. The user may enter a specific value for a lower bound or specify that no lower bound is to be applied. The higher level menu is the Test Operator Menu.

#### OPTIONS

(option)	(abbrev)
NONE	/

#### OPTION DESCRIPTION

NONE - Allows the user to select no lower bound for item value. No lower bound means that this test is automatically satisfied. When the NONE option is selected, the Upper Bound Menu is displayed.

#### PROMPT

- The form for a specific value depends upon the type of the item. A TYPE CH08 item is 8 character word. A bound for this would be any character string with 8 or fewer characters. A TYPE TIME item is time entered HHMM. A TYPE LTLN item is geographical location and gives the Southwest corner of the range of co-ordinates. It may be entered as latitude and longitude or as a UTM. A TYPE INT item is an integer, and a TYPE REAL item is a decimal number. In these cases the user may enter an integer or a real number respectively. When a value is entered, the Upper Bound Menu is displayed.

### III.0.19 MAIN MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The MAIN Menu is the first menu displayed in the CHAPS interactive Menu Mode. It displays options to branch to any one of the second level menus. The second level menus start the main tasks of the CHAPS system. This is the highest level CHAPS Menu.

#### OPTIONS

(option)	(abbv)
DATABASE	DA
DISPLAY	DI
PLAN	PL
EIFEL	EI
SPECIAL	SP
PENETRATE	PE

#### OPTION DESCRIPTION

DATABASE - Allows the user to add, delete, change, copy, and show selected parts of the data base. In addition the database function allows the user to create and modify and output database information to a file or terminal in a structured report format through the report generator. When this option is selected, the Data Base Menu is displayed.

DISPLAY - Allows the user to select options for the graphical display. When the DISPLAY option is selected, the Display Menu is displayed.

PLAN - Allows the user to create routing for a determined tasking of helicopter attack assets. In PLAN the user may modify existing routes, suppress threats, or display attack coordination. When PLAN is selected the PLAN OPTIONS Menu is displayed.

EIFEL - Allows the user to do EIFEL processing. When this option is selected, the Eifel Menu is displayed.

SPECIAL - Allows the user to perform any of a variety of specialized functions. The user may initiate reading from a command file, execute individual CHAPS algorithms, or get a listing of internal program parameters. When the SPECIAL option is selected, the Special Menu is displayed.

PENETRATE - Allows the user to select the penetration altitude for the attack aircraft. When this option is selected, the Penetrate Menu is displayed.

### III.0.20 MISSION SHOW MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The MISSION SHOW Menu allows the user to select the missions for the target displayed on the menu. The higher level menu is the Targets Menu.

#### OPTIONS

(option)	(abbv)
DONE	/
ALL	AL
CLEAR	CL

(VARIABLE OPTIONS)

#### OPTION DESCRIPTION

DONE - Allows the user to tell FLAPS he or she has selected all the missions he or she wishes to see. When the DONE option is selected, the missions will be shown and the Show Menu displayed.

ALL - Allows the user to select all missions for the target. Selecting this key toggles on all missions in the menu. When the ALL option is selected, the Mission Show Menu is redisplayed.

CLEAR - Allows the user to clear selections from the menu and begin selecting missions again. When the CLEAR option is selected, the Mission Show Menu is redisplayed.

(VARIABLE OPTIONS) - As Required

### III.0.21 NUMBER A/C MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The NUMBER A/C Menu allows the user to select the number of aircraft of a particular type for a mission. The higher level menu is the Select Unit Menu.

### III.0.22 OPEN MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The OPEN Menu allows the user to enter the name of the array or table he or she wishes to open. The user is prompted for the access mode and status of the array or table. The higher level menu is the Special Menu.

### III.0.23 OPEN ACCESS MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The OPEN ACCESS Menu allows the user to specify the access type for table or array the user wishes to open. The access type determines whether the user will be allowed to read, show the file, or write to it. The higher level menu is the Open Status Menu.

#### OPTIONS

(option)	(abbv)
SOFTREAD	SR
READ	R
SOFTREAD/WRT	SR/W
READ/SOFTWRT	R/SW
READ/WRITE	R/W

#### OPTION DESCRIPTION

SOFTREAD - Allows the user to specify an access type for the table or array as Software Read only. The software is allowed to read the file, but the user will not be able to show the contents of the file using the Database Show command. Deleting, adding or making changes to the file will not be permitted.

READ - Allows the user to specify an access type for the table or array as Read only. The software is allowed to read the file and the user will be able to show the contents of the file using the Database Show command. Deleting, adding or making changes to the file will not be permitted.

SOFTREAD/WRT - Allows the user to specify an access type for the table or array as Software Read/Write. The software is allowed to read the file, and write to it, but the user will not be able to show the contents of the file using the Database Show command. Deleting, adding or making changes to the file will not be permitted.

READ/SOFTWRT - Allows the user to specify an access type for the table or array as Read/Software Write. The software is allowed to read the file, and write to it. The user will be able to show the contents of the file using the Database Show command. Deleting, adding or making changes to the file will not be permitted.

READ/WRITE - Allows the user to specify an access type for the table or array as Read/Write. The software is allowed to read the file, and write to it. The user will be able to show the contents of the file using the Database Show command. Deleting, adding or making changes to the file will be permitted.



### III.0.24 OPEN FILENAME MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The OPEN FILENAME Menu allows the user to enter the name of the file table or array he or she wishes to open. The higher level menu is the Open Menu.

#### PROMPT

- The name of the file must be a valid table name or array name. Returns to the Special Menu.

### III.0.25 OPEN STATUS MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The OPEN STATUS Menu allows the user to select the status of the array or table he or she wishes to open. The higher level menu is the Open Filename Menu.

#### OPTIONS

(option)	(abbv)
OLD	OLD
NEW	NEW

#### OPTION DESCRIPTION

OLD - Allows the user to open an old table or array. Entering the status old assumes that the file already exists. Selecting this option leads to the Open Access Menu.

NEW - Allows the user to open a new table or array. This will create a new file with the name entered by the user in the Open Filename Menu. Selecting this option, leads to the Open Access Menu.

### III.0.26 OUTPUT FILE MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The OUTPUT FILE Menu allows the user to select a filename for an output file according to the following cases:

##### CASE HIGHER LEVEL MENU NEXT ACTION

----- ATO,ATM  
Report Show Menu Report is written to selected file Taboo Report Show Menu The  
Taboo Menu is displayed Other Report Report Proc. Menu Report Bounds Menu is  
displayed if

there are wildcard bounds; else

the report is written to the file Eifel Output Input File Menu Eifel  
output file is created Command Output Special Menu Succeeding commands written  
to file Data Base Data Base Menu Table Write Menu is displayed

#### OPTIONS

(option)	(abbv)
DEFAULT	.
LOGFILE	LO

#### OPTION DESCRIPTION

DEFAULT - Allows the user to select the default filename for the output file.

LOGFILE - Allows the user to send file output to the CHAPS or SUPR logfile.

#### PROMPT

- To enter a file name other than the default or the logfile the format is AAAAAA.AAA. The first character must be a letter of the alphabet. The name will be 1 to 6 characters long with a 3 character extension. Example : to name a file MYFILE with an extension of DAT the valid entry would be MYFILE.DAT.

### III.O.27 PENETRATION MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The PENETRATION Menu allows the user to select the penetration altitude of the attack aircraft through the forward line of own troops. Selecting the EXIT option will take you back to the Main Menu without changing the altitude. The higher level menu is the Main Menu.

#### OPTIONS

(VARIABLE OPTIONS)

#### OPTION DESCRIPTION

(VARIABLE OPTIONS) - As Required

### III.0.28 PLAN DESC MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The PLAN DESC Menu allows the user to enter a description, plan type, start time and end time of the plan being changed. The default values may be used while changing an existing plan. The higher level menu is the Plan Options Menu.

#### OPTIONS

(option)	(abbv)
DESC	DE
TYPE	TY
START	ST
END	EN

#### OPTION DESCRIPTION

DESC - Allows the user to change the plan description. A plan description may be up to 24 characters long. To exit from this menu type EXIT in the DESC field.

TYPE - Allows the user to change the plan type from TOT to FEBA crossing. These are the only acceptable values.

START - Allows the user to select the start time of the new plan window. Time format is HHMM and should be followed exactly.

END - Allows the user to select the end time of the new plan window. Time format is HHMM and should be followed exactly.

### III.0.29 PLAN OPTIONS MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The PLAN OPTIONS Menu allows the user to select the routing function to be performed. The user may use this menu to suppress threats, show and review routes, create minimum risk routes, create or modify a mission manually, or show attack helicopter coordination. The higher level menu is the Plan Menu.

#### OPTIONS

(option)	(abbrev)
ROUTE	RO
SAVE	SA
SHOW	SH
SUPPORT	SU
REROUTE	RR
REVIEW	RV
REPORTS	RE
MANUAL	MA
TIME PHASE	TI

#### OPTION DESCRIPTION

ROUTE - Compute routes for current tasking. This option will operate on the unit-dmpi tasking contained in the current plan table record. If there is no tasking information, then no action will be taken.

SAVE - Allows the user to save any created or modified routes created during the planning session. The user should always save before leaving PLAN unless he wants to discard the changes made during the planning session.

SHOW - Allows the user to review the contents of the current Plan. When this option is selected, the contents of the Plan are shown and the user is returned to the Plan Options Menu.

SUPPORT - Allows the user to position support assets and calculate their effectiveness. When this option is selected, the Plan Support Menu is displayed.

REROUTE - Allows the user to reroute the plan, which will include the effects of suppression on selected paths.

REVIEW - Allows the user to review the mission parameters. When this option is selected, the Do Review Menu is displayed.

REPORT - Allows the user to write any report which is currently described in the database to an output file.

MANUAL - Allows the user to manually modify a planned route. The user may add or delete points, or reoptimize through an alternate FEBA crossing area.

TIME PHASE - Allows the user to graphically display missions of a plan in time increments.

### III.0.30 PLAN SUPPORT MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The PLAN SUPPORT Menu allows the user to show current support for the plan they are working on, calculate support effectiveness, and delete or add support. The higher level menu is the Plan Options Menu.

#### OPTIONS

(option)	(abbv)
CALCULATE	CA
CLEAR	CL
SELECT	SE
SHOW	SH

#### OPTION DESCRIPTION

CALCULATE - Allows the user to calculate the suppression of the selected threats. Suppressed threats are removed entirely from the statespace area. When this option is selected, effectiveness is calculated and the user is returned to the Plan Support Menu.

CLEAR - Allows the user to clear the current list of threats which are to be used during the suppression calculation.

SELECT - Allows the user to select threats to remove from the statespace area via suppression. When this option is selected, the Select Threat pop up box is displayed.

SHOW - Allows the user to show threats currently slated for suppression. When this option is selected, the threat information is displayed and the user is returned to the Plan Support Menu.



### III.0.31 PURGE MENU

#### PROGRAM(S)

SUPR.

#### PURPOSE AND OVERVIEW

The PURGE Menu allows the user to select whether to purge all threat types or only a specific type from the threat files 'THRT', 'TOBS', 'MASN'. If the user wishes to completely re-initialize the statespace, he/she should enter ALL to the Purge Menu, and WHENEVER to the Purge Time Menu. The higher level menu is the SUPR Main Menu.

#### OPTIONS

(option)	(abbrev)
ALL	AL
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

ALL - Allows the user to purge all the threats from the threat files 'THRT', 'TOBS' and 'MASN'. When the ALL option is selected, the Purge Time Menu is displayed.

(VARIABLE OPTIONS) - As Required

### III.O.32 PURGE TIME MENU

#### PROGRAM(S)

SUPR.

#### PURPOSE AND OVERVIEW

The PURGE TIME Menu allows the user to enter a purge date/time, so that those threats whose last reported observation is more than twice the dwell time earlier than the entered date/time will be purged from the threat files. The dwell time differs for each type of threat; its value may be checked by showing the item, DTIM, in the TMDL table. The higher level menu is the Purge Menu.

#### OPTIONS

(option)	(abbrev)
WHENEVER	WH

#### OPTION DESCRIPTION

WHENEVER - Allows the user to specify that all threats of the selected type or types are to be purged from the threat files. In this case, threats are purged whether or not they are obsolete. When the WHENEVER option is selected, the threats are immediately purged.

#### PROMPT

- To enter purge time use format ddhmm with no spaces, and with zeroes required -- example 081305 is 1:05 p.m. zulu on the 8th day of the month. When the value is entered, threats are immediately purged.

### III.0.33 RECORD CHANGE MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The RECORD CHANGE Menu allows the user to select the record/s he or she wishes to change in the already selected table. A list of all the records in the user specified table is displayed. An asterisk will appear beside every record that is selected. This is a toggle menu. Selections may be toggled on or off by entering the selection again. The higher level menu is the Table Change Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/
ALL	AL
CLEAR	CL
IF	IF

(VARIABLE OPTIONS)

#### OPTION DESCRIPTION

DONE - Allows the user to complete the selection of record/s and proceed to changing the record/s. When this option is selected, the user will be prompted for the items in the record to change. The Change Item Menu will then be displayed.

ALL - Allows the user to select all the records in the table to change. An asterisk will appear beside all the records. Any record that has been selected may be un-selected by selecting it again.

CLEAR - Allows the user to clear off any selection made so far. The user may now start with a clean slate.

IF - Allows the user to select the records on the basis of their attributes. When the IF option is selected, the Test Item Menu is displayed.

(VARIABLE OPTIONS) - As Required

#### PROMPT

- The key abbreviations for this menu (appearing in parentheses in far righthand section of the menu) represent record numbers in the table. To select a range of records, you may enter <record 1>:<record 2> for a range of records between and including record 1 and record 2. Example: for records 2 through 11 enter 2:11.

### III.0.34 RECORD COPY MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The RECORD COPY Menu allows the user to select the record that will be copied and appended to the already selected table. The table will then have an identical record with a different ID. A list of all the records in the table is displayed in the menu. The higher level menu is the Table Copy Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

DONE - Allows the user to complete selecting record to copy. The Table Copy Menu is displayed.

(VARIABLE OPTIONS) - As Required

### III.0.35 RECORD DELETE MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The RECORD DELETE Menu allows the user to select record(s) from the the already selected table that will be deleted. The list of all the records that may be deleted is displayed in the menu. The higher level menu is the Table Delete Menu.

#### OPTIONS

(option)	(abbv)
DONE	/
ALL	AL
CLEAR	CL
IF	IF

(VARIABLE OPTIONS)

#### OPTION DESCRIPTION

DONE - Allows the user to complete the selection of record/s that will be deleted from the table. When this option is selected, the selected record/s will be deleted. The same menu is re-displayed until menu-backup option is selected.

ALL - Allows the user to select all the records in the table to be deleted. An asterisk will appear beside all the records. Any record that has been selected may be un-selected by selecting it again.

CLEAR - Allows the user to reset any selection made so far. The user may now start with a clean slate.

IF - Allows the user to select the records on the basis of their attributes. When the IF option is selected, the Test Item Menu is displayed.

(VARIABLE OPTIONS) - As Required

#### PROMPT

- The key abbreviations for this menu (appearing in parentheses in far righthand section of the menu) represent record numbers records in a table. To select a range of records, you may enter <record 1>:<record 2> for a range of records between and including record 1 and record 2. Example: for records 2 through 11 enter 2:11.

### III.0.36 RECORD SHOW MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The Record Show Menu allows the user to select the records from an already selected table that will be shown on the screen. The higher level menu is the Show Menu.

#### OPTIONS

(option)	(abbv)
DONE	/
ALL	AL
CLEAR	CL
IF	IF

(VARIABLE OPTIONS)

#### OPTION DESCRIPTION

DONE - Allows the user to complete selecting the records to be shown from the already selected table. When this option is selected, the Show Item Menu is displayed.

ALL - Allows the user to select all the records in the table to be shown. An asterisk will appear beside all the records. Any record that has been selected may be un-selected by selecting it again.

CLEAR - Allows the user to reset any selection made so far. The user may now start with a clean slate.

IF - Allows the user to select the records on the basis of their attributes. When the IF option is selected, the Test Item Menu is displayed.

(VARIABLE OPTIONS) - As Required

#### PROMPT

- The key abbreviations for this menu (appearing in parentheses in far righthand section of the menu) represent record numbers records in a table. To select a range of records, you may enter <record 1>:<record 2> for a range of records between and including record 1 and record 2. Example: for records 2 through 11 enter 2:11.

### III.0.37 RECORD WRITE MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The RECORD WRITE Menu allows the user to select the record/s he or she wishes to write from the already selected table. A list of the records in the user specified table is displayed. An asterisk will appear beside every record that is selected. This is a toggle menu. Selections may be toggled on or off by entering the selection again. The higher level menu is the Table Write Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/
ALL	AL
CLEAR	CL
IF	IF

(VARIABLE OPTIONS)

#### OPTION DESCRIPTION

DONE - Allows the user to complete the selection of record/s and proceed to writing the record/s. When this option is selected, the records will be written, a message as to how many were written is issued, and the Table Write Menu will then be displayed.

ALL - Allows the user to select all the records in the table to write. An asterisk will appear beside all the records. Any record that has been selected may be un-selected by selecting it again.

CLEAR - Allows the user to clear off any selection made so far. The user may now start with a clean slate.

IF - Allows the user to select the records on the basis of their attributes. When the IF option is selected, the Test Item Menu is displayed.

(VARIABLE OPTIONS) - As Required

#### PROMPT

- The key abbreviations for this menu (appearing in parentheses in far righthand section of the menu) represent record numbers in the table. To select a range of records, you may enter <record 1>:<record 2> for a range of records between and including record 1 and record 2. Example: for records 2 through 11 enter 2:11.

### III.0.38 REPORT MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPORT Menu allows the user to select a report for processing or create a new report. Processing includes showing, writing, modifying and deleting the report. When a report is selected, the Report Proc. Menu is displayed. The higher level menu is the Database Menu.

#### OPTIONS

(VARIABLE OPTIONS)

#### OPTION DESCRIPTION

(VARIABLE OPTIONS) - As Required

#### PROMPT

To create a new report the user must enter the name of the new report here. The name of a report must be 8 characters or less. When the name of a new report is entered, the Report Table1 Menu is displayed.



### III.0.39 REPORT BOUNDS MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPORT BOUNDS Menu allows the user to input new bounds or use default bounds for the report being shown. If the report HAS NOT been shown, the default bounds are NONE (/). If bounds are NONE, this means that all tests which have wildcard bounds are automatically satisfied for every record. If the report HAS been shown, the default bounds are those previously used. The higher level menu is the Report Proc. Menu.

#### OPTIONS

(option)	(abbrev)
DEFAULT	.
NEW	NE

#### OPTION DESCRIPTION

DEFAULT - Allows the user to select default bounds for all items in the report having wildcard (\*) bounds. When the DEFAULT option is selected, the report is shown and then the Report Proc. Menu is displayed.

NEW - Allows the user to input bounds for each item in the report that has a wildcard (\*) bound. When the user selects the NEW option, the Report Low \* Menu is displayed.

### III.0.40 REPORT DELETE MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPORT DELETE Menu asks the user for verification before deleting a report. The higher level menu is the Report Proc. Menu.

#### OPTIONS

(option)	(abbv)
YES	Y
NO	N

#### OPTION DESCRIPTION

YES - Allows the user to delete the report. When the YES option is selected, the Report Proc. Menu is displayed.

NO - Allows the user to rescue the report from deletion. When the NO option is selected, the Report Proc. Menu is displayed.

### III.0.41 REPORT DESCR MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPORT DESCR Menu allows the user to enter a description for the report he or she has just created or modified. The higher level menu is the Report Name Menu.

#### PROMPT

- The description must be twenty-four characters or less. If it is longer than this, it will be truncated. When the description is entered, the Report Proc. Menu is displayed.

### III.0.42 REPORT GENERA MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPORT GENERATION Menu allows the user to select a report to output. The report is output to a file with the same name as the report ( NAME.REP ). The higher level menu is the Database Menu.

#### OPTIONS

(VARIABLE OPTIONS)

#### OPTION DESCRIPTION

(VARIABLE OPTIONS) - As Required

### III.0.43 REPORT HEADER MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPORT HEADER Menu allows the user to enter new upper and lower headers for each item shown in the report. The user may also choose to leave the current header intact by selecting the default option. This menu is redisplayed until all headers have been prompted for. The higher level menu is the Report Modify Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/
DEFAULT	.

#### OPTION DESCRIPTION

DONE - Allows the user to indicate that he or she is finished with modifying headers. When the DONE option is selected, the Report Modify Menu will be displayed.

DEFAULT - Allows the user to default header to current value. When the DEFAULT option is selected, either the Report Header Menu or the Report Modify Menu will be displayed.

#### PROMPT

- The user may enter his own headers for columns by entering a four character header name. This name will replace the name given by the default key in the menu. Each column has two headers, an upper and a lower. The upper one will appear directly over the lower one in the appropriate column. When a header name is entered, this menu will reappear until all headers have been done. Then the Report Modify Menu will be displayed.

### III.0.44 REPORT HI \* MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPORT HI \* Menu allows the user to input upper bounds for items in the report with wildcard (\*) bounds. He or she may also choose no upper bound for the item. The higher level menu depends upon the sequence of items with wildcard bounds. It may be either the Report Low \* Menu, the Report Hi \* Menu, or the Report Bounds Menu.

#### OPTIONS

(option)	(abbrev)
NONE	/

#### OPTION DESCRIPTION

NONE - Allows the user to select no upper bound for the item. No upper bound means that this test is automatically satisfied. When the NONE option is selected, either the Report Bounds Menu, the Report Low \* Menu, or the Report Hi \* Menu may be displayed.

### III.0.45 REPORT LOW \* MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPORT LOW \* Menu allows the user to input lower bounds for items in the report with wildcard (\*) bounds. He may also choose no lower bound for the item. The higher level menu depends upon the sequence of items with wildcard bounds. It may be either the Report Low \* Menu, the Report Hi \* Menu, or the Report Bounds Menu.

#### OPTIONS

(option)	(abbrev)
NONE	/

#### OPTION DESCRIPTION

NONE - Allows the user to select no lower bound on the item. No lower bound means that this test is automatically satisfied. When the NONE option is selected, either the Report Bounds Menu, the Report Low \* Menu, or the Report Hi \* Menu may be displayed.

### III.0.46 REPORT LOWER MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPORT LOWER Menu allows the user to input bounds on an item he or she wishes to test in the report. The user may enter a specific value for a bound or may select an option from the menu (See Keys for Explanation). The higher level menu is the Report Test Menu.

#### OPTIONS

(option)	(abbrev)
NONE	/
*	*

#### OPTION DESCRIPTION

NONE - Allows the user to select no lower bound for item value. No lower bound means that this test is automatically satisfied. When the NONE option is selected, the Report Upper Menu is displayed.

\* - Allows the user to postpone entering a specific bound for the item until he or she shows or writes the report. When the \* option is selected, the Report Upper Menu is displayed.

#### PROMPT

- The form for a specific value depends upon the type of the item. A TYPE CH08 item is 8 character word. A bound for this would be any character string with 8 or fewer characters. A TYPE TIME item is time entered HHMM. A TYPE LTLN item is latitude or longitude and is entered DD-MM-SS.SD. Also, an item may be REAL or INT, in these cases the user may enter a real or an integer number respectively. When a value is entered, the Report Upper Menu is displayed.



### III.0.47 REPORT MODIFY MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPORT MODIFY Menu allows the user to select the way in which he or she wishes to modify the current report. When the user has completed all modifications he or she may select DONE to exit this menu. The higher level menu is the Report Proc. Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/
ITEMS	IT
HEADERS	HE

#### OPTION DESCRIPTION

DONE - Allows the user to tell CHAPS that he or she is finished with report modifications. When the DONE option is selected, the Report Proc. Menu is displayed.

ITEMS - Allows the user to modify the selection of items for the report. This option also allows the user to change upper and lower bounds for items in the report. When the ITEMS option is selected, the Report Test Menu is displayed.

HEADERS - Allows the user to modify column headers for each item shown in the report. When the HEADERS option is selected, the Report Header Menu will be displayed.

### III.0.48 REPORT NAME MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPORT NAME Menu allows the user to input a new name for a modified report. The higher level menu is the Reprt Replace Menu.

#### PROMPT

- A new report name must be 8 characters or less. When the name is entered, the Report Desc Menu will be displayed.

### III.0.49 REPORT PROC. MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPORT PROC. Menu allows the user to show, write, modify or delete the current report. The higher level menu is the Report Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/
SHOW	SH
WRITE	WR
MODIFY	MO
DELETE	DE

#### OPTION DESCRIPTION

DONE - Allows the user to finish work on the current report. When the DONE option is selected, the Report Menu is displayed.

SHOW - Allows the user to show the current report on the terminal. The report will appear 24 lines at a time. After each section the user will be asked to enter Q to quit or hit carriage return to continue. After the report has been shown (or if the user enters Q) this menu will be redisplayed (Report Proc.). When the SHOW option is selected, either the report will be shown or the Report Low \* Menu or Report Hi \* Menu will be shown.

WRITE - Allows the user to write a report to a file on disk. The report will not appear on the terminal screen if this option is selected. The user should first SHOW the report and then WRITE it. When the WRITE option is selected, the Output File Menu will be displayed.

MODIFY - Allows the user to modify a report. When the MODIFY option is selected, the Report Modify Menu is displayed.

DELETE - Allows the user to delete the current report. When the DELETE option is selected, the Report Delete Menu is displayed.

### III.0.50 REPORT SHOW MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPORT SHOW Menu allows the user to select table items he or she wishes to show in the report. Selected items are indicated by \*'s in the menu. If you wish to not see an item that has been selected, you may toggle that item off by selecting it again. Items may be toggled on and off in this way until you reach your final selection. Hitting the DONE key will save your selections. The higher level menu is the Report Test Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/
CLEAR	CL
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

DONE - Allows the user to finish selection of items. When the DONE option is selected, either the report will be completed and the Report Sort Menu displayed (if no more tables can be added) or the Report Table2 Menu or Report Table3 Menu will be displayed.

CLEAR - Allows the user to clear all selections from the menu and start selecting items again. When the CLEAR option is selected, the Report Show Menu will be redisplayed with all options toggled off.

(VARIABLE OPTIONS) - As Required

### III.0.51 REPORT SORT MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPORT SORT Menu allows the user to select a table item he or she wishes to use for sorting the report. The higher level menu is the Report Show Menu.

#### OPTIONS

(option)	(abbrev)
NONE	/
DEFAULT	.
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

NONE - Allows the user to specify that sorting is not desired. In this case, the report will be presented in the order in which records are stored in the database.

DEFAULT - Specifies that the indicated default item is to be used for sorting the report.

(VARIABLE OPTIONS) - As Required

#### PROMPT

- The type of item chosen will govern the type of sorting performed: Character items are sorted alphabetically based on the 1st 12 characters; Real and Integer items are sorted numerically; Date, Time and Date/Time items are sorted chronologically; Latlon items are sorted numerically based on latitude. When any option is selected, the report will be completed, and the Report Proc. Menu displayed.

### III.0.52 REPORT TABLE1 MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPORT TABLE1 Menu allows the user to select the first table for the report. Items chosen from the first table will make up the left hand section of the report. The higher level menu is the Report Menu.

#### OPTIONS

(VARIABLE OPTIONS)

#### OPTION DESCRIPTION

(VARIABLE OPTIONS) - As Required

### III.0.53 REPORT TABLE2 MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPORT TABLE2 Menu allows the user to select the second table for the report. Items from this table will make up the second section of the report. The higher level menu is the Report Show Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

DONE - Allows the user to tell CHAPS that he or she does not wish to add any more sections to the report. When the DONE option is selected, the Report Proc. Menu is displayed.

(VARIABLE OPTIONS) - As Required

### III.0.54 REPORT TABLE3 MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPORT TABLE3 Menu allows the user to select the third and last table in the report. Items from this table will make up the last section of the report. The higher level menu is the Report Show Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/

(VARIABLE OPTIONS)

#### OPTION DESCRIPTION

DONE - Allows the user to tell CHAPS that he or she does not wish to add any more sections to the report. When the DONE option is selected, the Report Proc. Menu is displayed.

(VARIABLE OPTIONS) - As Required



### III.0.55 REPORT TEST MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPORT TEST Menu allows the user to select table items he or she wishes to test when the report is being written. After selecting each item the user will be asked for upper and lower bounds of the item. When the report is written, only items satisfying these bounds will be shown. Items may be toggled on and off. Items selected are indicated by \*'s. If the user does not want an item that has been selected in the report, selecting that item again will turn it off. The higher level menu will be the Report Table1, Report Table2 or Report Table3 Menu (if creating a report) or the Report Modify or Report Show Menu (if modifying a report).

#### OPTIONS

(option)	(abbrev)
DONE	/
CLEAR	CL
SHOW	SH
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

DONE - Allows the user to tell CHAPS that he or she is done selecting items. When the DONE option is selected, either the Report Proc. Menu (if report is complete) or the Report Table2 Menu or the Report Table3 Menu is displayed.

CLEAR - Allows the user to clear all selections from the menu and start selecting items again. When the CLEAR option is selected, the Report Test Menu will be redisplayed with all options toggled off.

SHOW - Allows the user to show upper and lower bounds he or she has chosen for items he or she wishes to test. When the SHOW option is selected, the items selected and their upper and lower bounds will be displayed. After this the Report Test Menu will be redisplayed.

(VARIABLE OPTIONS) - As Required

### III.0.56 REPORT UPPER MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPORT UPPER Menu allows the user to input bounds on an item he or she wishes to test on in the report. The user may enter a specific value for a bound or he or she may select an option from the menu (See Keys for Explanation). The higher level menu is the Report Test Menu unless the item is longitude. In this case the higher level menu is the Report Lower Menu.

#### OPTIONS

(option)	(abbrev)
NONE	/
*	*

#### OPTION DESCRIPTION

NONE -The no upper bound option means that the upper bound test is automatically satisfied for every record. When the NONE option is selected, either the Report Lower Menu or the Report Test Menu will be displayed.

\* - Allows the user to postpone entering a specific bound for the item until he or she shows or writes the report. When the \* option is selected, either the Report Lower Menu or the Report Test Menu is displayed.

#### PROMPT

- The form for a specific value depends upon the type of the item. A type CH08 item is a 8 character word, a bound for this would be any character string with 8 or fewer characters. A type TIME item is time entered HHMM. A type LTLN item is latitude or longitude and is entered DD-MM-SS.SD. Also, an item may be REAL or INT, in these cases the user may enter a real or an integer number. When a value is entered, either the Report Lower Menu or the Report Test Menu is displayed.

### III.0.57 REPRT REPLACE MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The REPRT REPLACE Menu allows the user to replace an old report with a newly modified version or give the new version a completely different name, allowing the old version to remain intact. The higher level menu is the Report Show Menu.

#### OPTIONS

(option)	(abbv)
REPLACE	RE
ADD	AD

#### OPTION DESCRIPTION

REPLACE - Allows the user to replace the old report with the new version just created. When the REPLACE option is selected, the Report Proc. Menu is displayed.

ADD - Allows the user to create a separate report from the old one. This new report will be the old one with any modifications just made. When the ADD option is selected, the Report Name Menu will be displayed.

### III.0.58 SELECT BASE MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The SELECT BASE Menu allows the user to select a starting, recovery, or alternate base for a new mission. The higher level menu is the Select Mission Menu.

#### OPTIONS

(option)	(abbrev)
FIND	FI
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

FIND - Allows the user to select a base graphically. The user can choose a base closest to the cursor and the id of that base will be returned to the program

(VARIABLE OPTIONS) - As Required

### III.0.59 SELECT DMPI MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The SELECT DMPI Menu allows the user to select a dmpi, given a target, for a new mission. The higher level menu is the Select Target Menu.

#### OPTIONS

(VARIABLE OPTIONS)

#### OPTION DESCRIPTION

(VARIABLE OPTIONS) - As Required

### III.0.60 SELECT MISSION MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The SELECT MISSION Menu allows the user to manually modify an existing mission. The user should select an existing route by clicking on one of the missions displayed on the menu. The higher level menu is the Plan Options Menu.

### III.O.61 SELECT ROZ MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The SELECT ROZ Menu allows the user to select the ROZ box at which he or she wishes to position EC AIRCRAFT. A list of possible EC ROZ boxes is displayed in the menu. The higher level menu is the Position Menu.

#### OPTIONS

(VARIABLE OPTIONS)

#### OPTION DESCRIPTION

(VARIABLE OPTIONS) - As Required

### III.0.62 SELECT TARGET MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The SELECT TARGET Menu allows the user to select a target for a new mission. The higher level menu is the Select Weapon Menu.

#### OPTIONS

(option)	(abbrev)
FIND	FI
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

FIND - Allows the user to select a target graphically. The user can choose a target closest to the cursor and the id of that target will be returned to the program

(VARIABLE OPTIONS) - As Required



### III.0.63 SELECT THRT MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

This menu allows the user to select the threats he or she wishes to display with the Display Menu options CIRCLES, EXPOSURE or THREATS. The user may choose to display all the threats in the database THRT file, threats of particular types, or specific threats. The higher level menu is the Display Menu.

#### OPTIONS

(option)	(abbv)
ALL	AL
CLEAR	CL
SPECIFIC	SP
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

ALL - Allows the user to select all threats records for display.

CLEAR - Allows the user to clear options selected from the menu and begin selection of threat records again.

SPECIFIC - Allows the user to select a specific threat(s) from the current threat laydown. When this option is selected, the user will be prompted for a threat name.

(VARIABLE OPTIONS) - As Required

### III.0.64 SELECT UNIT MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The SELECT UNIT Menu allows the user to select a unit, given a base, for a new mission. The higher level menu is the Select Base Menu.

#### OPTIONS

(VARIABLE OPTIONS)

#### OPTION DESCRIPTION

(VARIABLE OPTIONS) - As Required

### III.0.65 SELECT WEAPON MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The SELECT WEAPON Menu allows the user to select a weapon load, given an aircraft type, for a new mission. The higher level menu is the Number A/C Menu.

#### OPTIONS

(VARIABLE OPTIONS)

#### OPTION DESCRIPTION

(VARIABLE OPTIONS) - As Required

### III.0.66 SHOW MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The SHOW Menu allows the user to show records of a table, or show contents of certain arrays, or show the ATO or the ATM, or show a sorted TABO frequency report for a user specified time period. The user may also choose to show a dictionary of the items in the database. The list of the options the user may choose from is displayed when this menu appears. The higher level menu is the Data Base Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/
ATO	ATO
ATM	ATM
TABO	TABO
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

DONE - Allows the user to complete showing information. The Database or Supr Database menu is displayed.

ATO - Allows the user to write the ATO report to the terminal and select a file the report will be written to. When this option is selected, the Output File Menu is displayed.

ATM - Allows the user to write the ATM report to the terminal and select a file the report will be written to. When this option is selected, the Output File Menu is displayed.

TABO - Allows the user to produce a sorted TABO frequency report, for a user specified time period. When the TABO option is selected, the Output File Menu is displayed.

(VARIABLE OPTIONS) - As Required

### III.0.67 SHOW ITEM MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The SHOW ITEM Menu allows the user to select the items of the selected table which will be shown on the screen. An asterisk appears beside each selected item. This is a toggle menu. To un-select any item, the item can be selected again. The higher level menu is the Show Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/
ALL	AL
CLEAR	CL
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

DONE - Allows the user to end selecting the items from the selected table and display them on the screen. The done option must be entered to display selected items.

ALL - Allows the user to display all the items of the selected table. An item may be unselected by selecting it again.

CLEAR - Allows the user to unselect all the selections made so far from the Show Item Menu.

(VARIABLE OPTIONS) - As Required

### III.0.68 SPECIAL MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The SPECIAL Menu allows the user to perform a variety of specialized functions. For example, the user may initiate reading from a command file, or execute individual CHAPS algorithms, or convert geographical co-ordinates. With the exceptions of reading a command file, processing EIFEL data and converting co-ordinates, these functions are of greater interest to the program developers than to the actual CHAPS users. The higher level menu is the Main Menu.

#### OPTIONS

(option)	(abbv)
READ	RE
LATLON	LL
INIT	IN
GEOM	GE
NODES	NO
ACCESS	AC
ARCS	AR
ROUTES	RO
SPAWN	SP
SAVE	SA
DEBUG	DE
OPEN	OP
PROCESS	PR
COMMAND	CO

#### OPTION DESCRIPTION

READ - Allows the user to read a command file. The user is prompted for the name of the file and whether he or she wishes the commands being read from the command file be echoed on the screen. When the READ option is selected, the Input File Menu is displayed.

LATLON - Allows the user to convert co-ordinates from any of 4 formats to the other three formats. the allowed formats are:

1) An optional UTM zone and a 6,8 or 10 character UTM co-ordinate. The UTM zone defaults to 31U, 32U or 33U, depending on the UTM co-ord.

2) Latitude/longitude in degrees, minutes, optional seconds, optional tenths of seconds and hemisphere.

3) Decimal latitude/longitude with a minus sign used for South latitude or West longitude.

4) Latitude/longitude in degrees, minutes, hundredths of minutes and hemisphere. When the LATLON option is selected, the Latlon Value menu is displayed.

INIT - Allows the user to initialize CHAPS tables and arrays. Planners need not issue this command, since this is automatically performed whenever it is required.

GEOM - Calculates geometrical parameters. Specifically, it converts information from the ALGP table to the program-friendly information in the GEOM common. Planners need not issue this command, since CHAPS automatically performs it whenever it is required.

NODES - Prepares a list of nodes -- staging bases, low level transit routes and targets. It also calculates the LLTR trees -- that is the sequence of low level transit routes which connect each entry LLTR to each reachable exit LLTR.

Planners need not issue this command, since CHAPS automatically performs it whenever it is required.

ACCESS - Determines which target/staging base pairs are accessible to each other. This determination is based on distance of flight, the available LLTRs, the aircraft types, and applicability of weapons to targets.

Planners need not issue this command, since CHAPS automatically performs it whenever it is required.

ARCS - Calculates the optimal Ingress arcs to each target from each accessible LLTR exit point. This calculation is very time consuming since it requires the dynamic programming algorithm to be executed to calculate the paths which minimize danger from threats.

Planners need not issue this command, since CHAPS automatically performs it whenever it is required.

ROUTES - Finds the optimal Ingress and Egress routes between each target and accessible staging base.

Planners need not issue this command, since CHAPS automatically performs it whenever it is required.

SPAWN - Allows the user to interrupt program execution to issue one VAX system command. Upon completion of the VAX system command, program execution is resumed. If the VAX system command was itself a SPAWN command, then program execution is not resumed. In this case VAX system commands may be issued until LOGOUT is typed. At that point program execution is resumed.

Planners need not be concerned with the SPAWN option.

SAVE - Flushes all buffers, closes the log file (CHAPS.LOG), opens a new version of the log file and continues execution. This option is useful for protecting the data base. SAVE may be executed periodically after significant processing has been performed.

Planners need not be concerned with this command.

DEBUG - Allows the user to set an internal program variable which determines how much debug output is produced by the program. Planners need not use this command, since the initialization command file will set the debug level to a value of 2.

OPEN - Allows the user to open a file. Selecting this option leads to the Open Menu.

PROCESS - Executes the CHAPS algorithms. This execution may require a significant amount of time to complete. Planners need not issue this command, since CHAPS automatically performs it whenever it is required (before attempting to issue a PLAN).

COMMAND - Writes all menu responses to an output file. This output file may be used as a command file in a subsequent execution of the program. When the COMMAND option is selected, the Output File Menu is displayed.



### III.0.69 TIME PHASE MENU

#### PROGRAM(S)

CHAPS

#### PURPOSE AND OVERVIEW

The TIME PHASE Menu allows the user to select the starting time and time increment for missions to be displayed. The higher level menu is the Enter Mission Menu.

#### OPTIONS

(option)	(abbv)
START	ST
INCREMENT	IN

#### OPTION DESCRIPTION

START - Allows the user to select the time to be used as the start time for missions to be displayed. The default time is the start time of the first mission to fly in this day. USE FORMAT MM (M = MINS), for example, 05 is five minutes.

INCREMENT - Allows the user to select the time to be used as the increment time for stepping thru the route displays. The default time is 15 minutes.

### III.0.70 STATES MENU

#### PROGRAM(S)

SUPR.

#### PURPOSE AND OVERVIEW

The STATES Menu is a special processing menu, which allows the user to add, delete, or mask threats individually or in selected groups. The higher level menu is the SUPR Special Menu.

#### OPTIONS

(option)	(abbrev)
INITIALIZE	IN
ADD	AD
DELETE	DE
MASK	MA

#### OPTION DESCRIPTION

INITIALIZE - Allows the user to reinitialize the statespace files 'MASN'. When this option is selected, the States Init Menu is displayed.

ADD - Allows the user to add individual or selected groups of threats to the statespace files 'MASN'. When this option is selected, the States Add Menu is displayed.

DELETE - Allows the user to delete individual or selected groups of threats from the statespace files 'MASN'. When this option is selected, the States Delete Menu is displayed.

MASK - Allows the user to terrain mask individual or selected groups of threats. A list of threat records is displayed in this menu. When this option is selected, the States Mask Menu is displayed.

### III.0.71 STATES ADD MENU

#### PROGRAM(S)

SUPR.

#### PURPOSE AND OVERVIEW

The STATES ADD Menu allows the user to select the threats to be added to the statespace files. A list of threat records is displayed in this menu. The higher level menu is the States Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/
ALL	AL
CLEAR	CL
IF	IF
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

DONE - Allows the user to continue on to the next menu. The SUPR Special Menu is displayed.

ALL - Allows the user to select all the threats on the menu

CLEAR - Allows the user to reset all the menu selections.

IF - Allows the user to select the threats on the basis of their attributes. When the IF option is selected, the Test Item Menu is displayed.

(VARIABLE OPTIONS) - As Required

### III.0.72 STATES DELETE MENU

#### PROGRAM(S)

SUPR.

#### PURPOSE AND OVERVIEW

The STATES DELETE Menu allows the user to select the threats to be deleted from the statespace files. The higher level menu is the States Menu.

#### OPTIONS

(option)	(abbv)
DONE	/
ALL	AL
CLEAR	CL
IF	IF
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

DONE - Allows the user to continue on to the SUPR SPECIAL Menu.

ALL - Allows the user to select all the threats on the menu

CLEAR - Allows the user to reset all the menu selections.

IF - Allows the user to select the threats on the basis of their attributes. When the IF option is selected, the Test Item Menu is displayed.

(VARIABLE OPTIONS) - As Required

### III.0.73 STATES INIT MENU

#### PROGRAM(S)

SUPR.

#### PURPOSE AND OVERVIEW

The STATES INIT Menu allows the user to initialize the terrain masked file 'TOBS', or the statespace files 'MASN'. The higher level menu is the States Menu.

#### OPTIONS

(option)	(abbrev)
MASN	MA
TOBS	TO

#### OPTION DESCRIPTION

MASN - Allows the user to reinitialize the statespace files. When this option is selected, the States Value Menu is displayed.

TOBS - Allows the user to reinitialize the terrain masked file. After the terrain masked file is reinitialized the program returns to the SUPR Special Menu.

### III.0.74 STATES MASK MENU

#### PROGRAM(S)

SUPR.

#### PURPOSE AND OVERVIEW

The STATES MASK Menu allows the user to select the threats to be terrain masked for the statespace files. An asterisk appears beside every threat that has been selected. This is a toggle menu where items may be toggled on or off. To Un-select any threat that has already been selected, the user may toggle off that selection by selecting the threat again. The asterisk should then disappear. The higher level menu is the States Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/
ALL	AL
CLEAR	CL
IF	IF
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

DONE - Allows the user to end selecting the threats to be terrain masked and return to the SUPR Special Menu.

ALL - Allows the user to select all the threats on the menu. An Asterisk will appear beside all the threats.

CLEAR - Allows the user to reset all the menu selections.

IF - Allows the user to select the threats on the basis of their attributes. When the IF option is selected, the Test Item Menu is displayed.

(VARIABLE OPTIONS) - As Required

### III.0.75 STATES VALUE MENU

#### PROGRAM(S)

SUPR.

#### PURPOSE AND OVERVIEW

The STATES VALUE Menu allows the user to select the background danger to which the statespace files will be initialized. The higher level menu is the States Init Menu.

#### OPTIONS

(option)	(abbrev)
DEFAULT	DE

#### OPTION DESCRIPTION

DEFAULT - Allows the user to reinitialize the statespace files to the default value.

#### PROMPT

- To enter a new value, the value must a positive real number less than 1.0. After the initialization, the SUPR Special Menu is displayed.

### III.0.76 SUBSCRIPT MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The SUBSCRIPT Menu allows the user to enter a different subscript than the one displayed on the menu while entering values for a vector item of the table. If a data base add function was being performed the higher level menu is the Add Vector Menu. If a data base change function was being performed the higher level menu is the Change Vector Menu.

#### PROMPT

- The valid subscript to enter for the item whose values are being entered must be less than or equal to the dimension of the item whose values are being entered. The value must be between 1 and the high value displayed on the top left hand side of the menu. The program then returns to the Add Vector Menu.



### III.0.77 SUPR DATABASE MENU

#### PROGRAM(S)

SUPR.

#### PURPOSE AND OVERVIEW

The SUPR DATABASE Menu allows the user to add, delete, change, and copy records and show selected or predefined parts of the database. The higher level menu is the SUPR Main Menu.

#### OPTIONS

(option)	(abbv)
DONE	/
ADD	AD
DELETE	DE
CHANGE	CH
COPY	CO
SHOW	SH
WRITE	WR

#### OPTION DESCRIPTION

DONE - Allows the user to complete database operations. The Supr Main Menu is displayed.

ADD - Allows the user to add a record to a table. The user is prompted to choose the table in which he or she wishes to add a record. When the ADD option is selected, the Table Add Menu is displayed..

DELETE - Allows the user to delete a record from a table. The user is prompted to choose the table from which he or she wishes to delete a record. When the DELETE option is selected, the Table Delete Menu is displayed.

CHANGE - Allows the user to change a record in a table. The user is prompted to choose the table in which he or she wishes to change a record. This option performs the same function as a DELETE plus an ADD command. When the CHANGE option is selected, the Table Change Menu is displayed.

COPY - Allows the user to copy one record from a table to a new record in the same table. The user is prompted to enter the name of the table he or she wishes to copy the record from. All information in the new record, except for the ID label will be identical to the old record. This command is useful for adding a record in a table that is to be identical or similar to another record in the same table. When the COPY option is selected, the Table Copy Menu is displayed.

SHOW - Allows the user to show records of a table, or the contents of certain arrays, or an ATO, ATM or TABOO report. The user is prompted to enter the name of the object he or she wishes to show. When the SHOW option is

selected, the Show Menu is displayed.

WRITE - Allows the user to write selected records from selected tables to an output file. The output file is a formatted sequential file, which may be edited, printed, etc. The file is in the proper format for a command file which may be used to re-load the database. When the WRITE option is selected, the Output File Menu is displayed.

### III.0.78 SUPR MAIN MENU

#### PROGRAM(S)

SUPR.

#### PURPOSE AND OVERVIEW

The SUPR MAIN Menu is the first menu displayed in the SUPR inter- active menu mode. It displays options to branch to any one of the second level menus. The second level menus start the main tasks of the SUPR system. The most frequently used processes should be UPDATE, PURGE, and LOCE. This is the highest level SUPR Menu.

#### OPTIONS

(option)	(abbv)
DATABASE	DA
UPDATE	UP
PURGE	PU
LOCE	LO
SPECIAL	SP
QUIT	QU

#### OPTION DESCRIPTION

DATABASE - Allows the user to add, delete, change, copy and show selected or predefined parts of the data base. When the DATABASE option is selected, the Data Base Menu is displayed.

UPDATE - Allows the user to add threats to the threat scenario. When this option is selected, the Update Menu is displayed.

PURGE - Allows the user to purge threats from the threat scenario. When this option is selected, the PURGE Menu is displayed.

LOCE - Allows the user to read and preprocess a LOCE input data file. When this option is selected, the Input File Menu is displayed. SUPR then reads and preprocesses the LOCE data file.

SPECIAL - Allows the user to use special processes that are not part of the normal threat processing. When this option is selected, the SUPR Special Menu is displayed.

QUIT - Allows the user to quit the current SUPR processing session. When the quit option is used to stop the execution of SUPR, the files are closed.

### III.0.79 SUPR SPECIAL MENU

#### PROGRAM(S)

SUPR.

#### PURPOSE AND OVERVIEW

The SUPR SPECIAL Menu allows the user to perform a variety of specialized functions. The use of this menu should be restricted to users thoroughly familiar with the processing of SUPR. The higher level menu is the SUPR Main Menu.

#### OPTIONS

(option)	(abbv)
LATLON	LL
INIT	IN
GEOM	GE
STATES	ST
READ	RE
SPAWN	SP
SAVE	SA
DEBUG	DE
PROCESS	PR
OPEN	OP
COMMAND	CO

#### OPTION DESCRIPTION

LATLON - Allows the user to convert co-ordinates from any of 4 formats to the other three formats. the allowed formats are:

- 1) An optional UTM zone and a 6,8 or 10 character UTM co-ordinate. The UTM zone defaults to 31U,32U or 33U, depending on the UTM co-ord.
- 2) Latitude/longitude in degrees, minutes, optional seconds, optional tenths of seconds and hemisphere.
- 3) Decimal latitude/longitude with a minus sign used for South latitude or West longitude.
- 4) Latitude/longitude in degrees, minutes, hundredths of minutes and hemisphere. When the LATLON option is selected, the Latlon Value menu is displayed.

INITIALIZE - This option allows the user to initialize all the SUPR tables and arrays. Planners need not issue this command, since this is automatically performed whenever it is required.

GEOM - This option allows the users to setup the statespace geometry. Planners need not be concerned with the GEOM option.

STATES - This option allows the user to individually process threats to fine tune the threat scenario. When this option is selected, the STATES Menu is displayed. Planners need not be concerned with the STATES option.

READ - This option allows the user to read a file. The user is prompted for the name and status of the file he or she wishes to read.

SPAWN - Allows the user to interrupt program execution to issue one VAX system command. Upon completion of the VAX system command, program execution is resumed. If the VAX system command was itself a SPAWN command, then program execution is not resumed. In this case VAX system commands may be issued until LOGOUT is typed. At that point program execution is resumed. Planners need not be concerned with the SPAWN option.

SAVE - Flushes all buffers, closes the log file (SUPR.LOG), opens a new version of the log file and continues execution. This option is useful for protecting the data base. SAVE may be executed periodically after significant processing has been performed.

DEBUG - Allows the user to set an internal program variable which determines how much debug output is produced by the program. Planners need not use this command, since ZSCONT.DAT command file will set the debug level to a moderate value such as 5. When this option is selected, the DEBUG Menu is displayed.

PROCESS - Allows the user to recreate the terrain masked 'TOBS,' and the statespace files 'MASN' from the current threat scenario.

OPEN - Allows the user to open a file. Selecting this option leads to the OPEN Menu.

COMMAND - Writes all menu responses to an output file. This output file may be used as a command file in a subsequent execution of the program.

### III.0.80 TABLE ADD MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The Table ADD Menu allows the user to add a record to a table. The user is provided with a list of tables to choose from. The user is allowed to select only one table to add a record to. The Add Vector Menu or the Add Scalar Menu is displayed. is displayed. The higher level menu is the Data Base Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

DONE - Allows the user to complete adding records. The Database or Supr Database menu is displayed.

(VARIABLE OPTIONS) - As Required

### III.0.81 TABLE CHANGE MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The Table Change Menu allows the user to change a record in a table. The user is provided with a list of tables to choose from. The user is allowed to select only one table to change a record in. The user will then have to enter the record and the items in that record to change. The higher level menu is the Data Base Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

DONE - Allows the user to complete changing records. The Database or Supr Database menu is displayed.

(VARIABLE OPTIONS) - As Required

### III.0.82 TABLE COPY MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The TABLE COPY Menu allows the user to select the table he or she wishes to copy the record from. The record will be copied and appended to the same table. All information in the new record, except for the ID label will be identical to the old record. This command is useful for adding a record in a table that is to be identical or similar to another record in the same table. The higher level menu is the Data Base Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

DONE - Allows the user to complete copying records. The Database or Supr Database menu is displayed.

(VARIABLE OPTIONS) - As Required



### III.0.83 TABLE DELETE MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The TABLE DELETE Menu allows the user to delete a record from a table. The user is provided with a list of tables to choose from. The user is allowed to select only one table to delete a record from. The higher level menu is the Data Base Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

DONE - Allows the user to complete deleting records. The Database or Supr Database menu is displayed.

(VARIABLE OPTIONS) - As Required

### III.0.84 TABLE WRITE MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The Table WRITE Menu allows the user to write records from a table. The user is provided with a list of tables to choose from. The user is allowed to select only one table to write from. The Record Write Menu is displayed. The higher level menu is the Output File Menu.

#### OPTIONS

(option)	(abbrev)
DONE	/
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

DONE - Allows the user to complete writing database contents to the output file. The Database or Supr Database menu is displayed.

(VARIABLE OPTIONS) - As Required

### III.0.85 TABOO MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The TABOO Menu allows the user to select the field the TABO frequency report will be sorted on. The higher level menu is the Output File Menu.

#### OPTIONS

(option)	(abbv)
FREQUENCY	FR
CALL SIGN	CA
AGENCY	AG

#### OPTION DESCRIPTION

FREQUENCY - Allows the user to select TABOO frequency as the field the TABO frequency report will be sorted on. When this option is selected, the Taboo Date Menu is displayed.

CALL SIGN - Allows the user to select call sign as the field the TABO frequency report will be sorted on. When this option is selected, the Taboo Date Menu is displayed.

AGENCY - Allows the user to select the issuing agency as the field the TABO frequency report will be sorted on. When this option is selected, the Taboo Date Menu is displayed.

### III.0.86 TABOO DATE MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The TABOO DATE Menu allows the user to enter the date for which the TABO frequency report will be created. The higher level menu is the Taboo Menu.

#### OPTIONS

(option)	(abbrev)
DEFAULT	.
ALL	AL

#### OPTION DESCRIPTION

DEFAULT - Allows the user to use today's date as the date for the TABO frequency report. When this option is selected, the Taboo Start Menu is displayed.

ALL - Allows the user to select all dates for the TABO frequency report. When this option is selected, the Taboo Start Menu is displayed.

#### PROMPT

- Enter DATE for TABOO list in form (DD-MON-YY). DD - should be any valid day of the month. MON - the first three letters of the English month. Example : to enter January 24 1987 the valid entry would be 24-JAN-87. When the date is entered, the Taboo Start Menu is displayed.

### III.0.87 TABOO END MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The TABOO END Menu allows the user to enter the end time for the TABOO time window. The higher level menu is the Taboo Start Menu.

#### OPTIONS

(option)	(abbrev)
DEFAULT	.

#### OPTION DESCRIPTION

DEFAULT - Allows the user to use 2400 as the end time for the TABOO time window.

#### PROMPT

- The user may select any valid time in the format HHMM. HH should be a value between 00 - 24. MM should be a value between 00 - 59. When the time is entered, the Taboo report is shown and the Show Menu is displayed.

### III.0.88 TABOO START MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The TABOO START Menu allows the user to enter the start time for the TABOO time window. The higher level menu is the Taboo Date Menu.

#### OPTIONS

(option)	(abbrev)
DEFAULT	.

#### OPTION DESCRIPTION

DEFAULT - Allows the user to use 0000 as the start time for the TABOO time window.

#### PROMPT

- The user may select any valid time in the format HHMM. HH should be a value between 00 - 24. MM should be a value between 00 - 59. When the time is entered, the Taboo End Menu is displayed.

### III.0.89 TARGETS MENU

#### PROGRAM(S)

CHAPS.

#### PURPOSE AND OVERVIEW

The TARGETS Menu allows the user to select a target for which he or she may see missions. A list of possible targets is displayed. The higher level menu is the Show Menu.

#### OPTIONS

(option)	(abbv)
DONE	/
(VARIABLE OPTIONS)	

#### OPTION DESCRIPTION

DONE - Allows the user to tell CHAPS that he has seen enough of missions for now. When the DONE option is selected, the Show Menu is displayed.

(VARIABLE OPTIONS) - As Required

### III.0.90 TEST CONTINUE MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The TEST CONTINUE Menu allows the user to specify whether he or she wishes to add another test condition to the current test, clear all conditions selected so far, or proceed to select records based on the currently selected conditions. The higher level menu is any of the various record selection menus which have an IF option.

#### OPTIONS

(option)	(abbrev)
DONE	/
CLEAR	CL
AND	
SHOW	SH

#### OPTION DESCRIPTION

DONE - Allows the user to tell CHAPS that the current test has been completely specified. When the DONE option is selected, the records satisfying the test conditions will be assembled into the higher level menu.

CLEAR - Allows the user to reset the test conditions he or she has entered so far and begin selecting them again. When the CLEAR option is selected, the Test Item Menu will be displayed.

AND - Allows the user to add another condition to the test. When the AND option is selected, the Test Item Menu will be displayed.

SHOW - Allows the user to show the test conditions he or she has selected. When the SHOW option is selected, the test items, test operators and test values or bounds are displayed. After this, the Test Continue Menu will be redisplayed.



### III.0.91 TEST ITEM MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The TEST ITEM Menu allows the user to select table items he or she wishes to test in selecting records. After selecting an item, the user will be asked for one of three test operators -- equality, list or range of values. Only the records which satisfy the tests will be selected. The higher level menu is any of the various record selection menus which have an IF option.

#### OPTIONS

(VARIABLE OPTIONS)

#### OPTION DESCRIPTION

(VARIABLE OPTIONS) - As Required

### III.0.92 TEST LIST MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The TEST LIST Menu allows the user to specify a list of possible values he or she wishes to test against the specified item. The user should enter each value in the list, and then enter the DONE option. The higher level menu is the Test Operator Menu.

#### OPTIONS

(option)	(abbv)
DONE	/
SHOW	SH
CLEAR	CL

#### OPTION DESCRIPTION

DONE - Allows the user to specify that the list is complete. When the DONE option is selected, the Test Continue Menu is displayed.

SHOW - Allows the user to review the test values specified so far. When the SHOW option is selected, the list of test values is displayed.

CLEAR - Allows the user to reset the list values he or she has entered so far and begin entering them again. When the CLEAR option is selected, the Test List Menu is redisplayed.

#### PROMPT

- The form for a specific value depends upon the type of the item. A TYPE CHO8 item is 8 character word. A bound for this would be any character string with 8 or fewer characters. A TYPE TIME item is time entered HHMM. A TYPE LTLN item is geographical location -- either latitude and longitude or as a UTM. A TYPE INT item is an integer, and a TYPE REAL item is a decimal number. In these cases the user may enter an integer or a real number respectively. When a value is entered, the Test List menu is redisplayed.

### III.0.93 TEST OPERATOR MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The TEST OPERATOR Menu allows the user to specify the type of test to be applied to the item which has just been chosen. The options are test for equality, for a list of possible values, and for a range of values between a lower and upper bound. The higher level menu is the Test Item Menu.

#### OPTIONS

(option)	(abbv)
EQUALS	=
LIST	IN
FROM	FR

#### OPTION DESCRIPTION

EQUALS - This option specifies that the item is to be tested for equality against a value. When the Equals option is chosen, the Test Value menu is displayed.

LIST - This option specifies that the item is to be tested for equality against a list of several possible values. When the List option is chosen, the Test List menu is repeatedly displayed until the user terminates the list with the Done option.

FROM - This option specifies that the item is to be tested for a range of values between a lower bound and an upper bound. When the From option is chosen, the Lower Bound menu is displayed.

### III.0.94 TEST VALUE MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The TEST VALUE Menu allows the user to specify a value that he or she wishes to test against the specified item. The higher level menu is the Test Operator Menu.

#### PROMPT

- The form for a specific value depends upon the type of the item. A TYPE CH08 item is 8 character word. A bound for this would be any character string with 8 or fewer characters. A TYPE TIME item is time entered HHMM. A TYPE LTLN item is geographical location -- either latitude and longitude or as a UTM. A TYPE INT item is an integer, and a TYPE REAL item is a decimal number. In these cases the user may enter an integer or a real number respectively. When a value is entered, the Test Continue Menu is displayed.

### III.0.95 UPPER BOUND MENU

#### PROGRAM(S)

CHAPS, SUPR.

#### PURPOSE AND OVERVIEW

The UPPER BOUND Menu allows the user to input bounds on an item he wishes to test against a range of values. The user may enter a specific value for an upper bound or specify that no upper bound is to be applied. The higher level menu is the Lower Bound Menu.

#### OPTIONS

(option)	(abbv)
NONE	/

#### OPTION DESCRIPTION

NONE - Allows the user to select no upper bound for item. No upper bound means that this test is automatically satisfied. When the NONE option is selected, the Test Continue Menu is displayed.

#### PROMPT

- The form for a specific value depends upon the type of the item. A TYPE CHO8 item is 8 character word. A bound for this would be any character string with 8 or fewer characters. TYPE TIME item is time entered HHMM. TYPE LTLN item is geographical location and gives the Northeast corner of the range of co-ordinates. It may be entered as latitude and longitude or as a UTM. A TYPE INT item is an integer, and a TYPE REAL item is a decimal number. In these cases the user may enter an integer or a real number respectively. When a value is entered, the Test Continue Menu is displayed.

**APPENDIX A**  
**MESSAGES**

ACCES101 - \*\*\*\*\*

ACCES1 EXECUTING

MESSAGE TYPE: INFORMATION

CAUSE: Start of the process to determine the accessibility of LLTR exit points to target after nodes has been calculated and before arcs are calculated.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

ACCES102 - TOO MANY ACCESSIBLE DROP OFF POINTS FOR TARGET <CHAR>

MESSAGE TYPE: WARNING

CAUSE: The maximum number of accessible drop off points exceeds the maximum allowed; the maximum is set with the parameter MXDPAC.

PROGRAM ACTION: The access list is written and the number of nodes is truncated.

USER ACTION REQUIRED: Verify additional nodes are required. See an SCT Engineer to change limits if necessary; otherwise, no action is necessary.

ACCES103 - TARGET <CHAR> (<INTG>) HAS <INTG> ACCESSIBLE NODES

MESSAGE TYPE: DEBUG

CAUSE: The number of accessible nodes for the named target is listed. Trace level is greater than 5.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

ACCES105 - ERROR PROCESSING ACCESS  
DATA BASE MANAGER ERROR ON FILE <CHAR>

MESSAGE TYPE: ERROR

CAUSE: Invalid data is found in the named file.

PROGRAM ACTION: Processing control is returned to the user.

USER ACTION REQUIRED: See an SCT Engineer.

ACCES106 - NO <CHAR>S FOR ACCESS CALCULATION  
PLEASE MAKE SURE THERE ARE VALID TARGETS AND BASES

MESSAGE TYPE: ERROR

CAUSE: The number of targets or the number of base is less than or equal to zero.

PROGRAM ACTION: Processing is terminated and the program returns to the calling menu.

USER ACTION REQUIRED: Add targets or bases to the appropriate files.

ACCES107 - TARGET <CHAR> (<INTG>) HAS <INTG> ACCESSIBLE NODES

MESSAGE TYPE: WARNING

CAUSE: The target be accessed has no accessible nodes. This message is written for debug levels 3 thru 5.

PROGRAM ACTION: The program continues accessibility processing.

USER ACTION REQUIRED: No action required.

ACCES108 - MORE THAN MXLLTR DROP OFF POINTS FOR TARGET <CHAR>

MESSAGE TYPE: WARNING

CAUSE: Too many LLTRs are accessible to the target.

PROGRAM ACTION: Only consider first MXLLTR LLTRs in accessibility.

USER ACTION REQUIRED: This should not happen. Report problem to SCT.

ANALYZ03 - CANNOT RECOGNIZE THRT TABLE

MESSAGE TYPE: ERROR

CAUSE: Error return from TBRCGZ. Problem is with the threat file THRT.

PROGRAM ACTION: Analyze processing is terminated. Program returns to the calling menu.

USER ACTION REQUIRED: User must determine and correct the problem with the data base file THRT.



ANALYZ05 - MISSION ANALYSIS COULD NOT BE COMPLETED

MESSAGE TYPE: ERROR

CAUSE: Error return from anyone of a number of called subroutines.

PROGRAM ACTION: Analyze processing terminated. Program returns to the calling menu.

USER ACTION REQUIRED: This message is issued along with other error messages from which the user can determine what is wrong and correct it.

ARCLER01 - ERROR # = <INTG> CALLED BY <CHAR> CONCERNING ARRAY <CHAR>  
UNABLE TO RECOGNIZE NAME

MESSAGE TYPE: ERROR

CAUSE: The subroutine ARRCGZ returned a completion code that indicates a failure to recognize the array name.

PROGRAM ACTION: Processing control is returned to the user.

USER ACTION REQUIRED: Verify the named file is available to the program. If name is in error, see an SCT Engineer.

ARCSS-01 - \*\*\*\*\*

ARCS EXECUTING

MESSAGE TYPE: INFORMATION

CAUSE: Start of the optimal arc path generation process.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

ARCSS-02 - ERROR PROCESSING DTNOMS, CHECK ALGP & ACFT

MESSAGE TYPE: ERROR

CAUSE: The execution of the subroutine DTNOMS failed while executing the subroutine TBREAD.

PROGRAM ACTION: Processing is interrupted.

USER ACTION REQUIRED: See message DTNOMS01 and verify the contents of the ALGP and ACFT records.

ARCSS-03 - ERROR PROCESSING <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The execution of the subroutine GETARC failed.

PROGRAM ACTION: Processing is interrupted.

USER ACTION REQUIRED: See messages from GETARC, ARREAD or ARWRIT.

ARCSS-04 - STATE SPACE <CHAR> DIMENSIONS INCONSISTENT WITH GEOM

MESSAGE TYPE: ERROR

CAUSE: The state space dimension array used by the subroutine ARRCGZ does not agree with the values in the GEOM file.

PROGRAM ACTION: Processing is interrupted.

USER ACTION REQUIRED: Verify state space dimensions.

ARDEF-01 - CANNOT FIND FILE <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The user-specified four-character file names does not match any files in the directory.

PROGRAM ACTION: The user is notified of the invalid selection.

USER ACTION REQUIRED: Enter a valid option.

ARDEF-02 - DXGE LESS THAN OR EQUAL TO 0.002 DEG

MESSAGE TYPE: ERROR

CAUSE: The process GEOMS has not been run to set the program geometry.

PROGRAM ACTION: Returns to the calling routine with no action taken.

USER ACTION REQUIRED: Run the process GEOMS from the special menu.

ARGET-01 - CANNOT RECOGNIZE OR GET ARRAY <CHAR> FOR SUBROUTINE  
<CHAR>

MESSAGE TYPE: ERROR

CAUSE: Invalid array name does not match ARCS, ARPE, ACCN, NBOX, NLIS, MISN, TASK or TREE.

PROGRAM ACTION: Processing is interrupted.

USER ACTION REQUIRED: Use the subroutine name to determine the origin of the invalid name. Check the appropriate data base file.

ARINIT01 - KREC,NAR,NAMAAA= <INTG> <INTG> <CHAR>

MESSAGE TYPE: DEBUG

CAUSE: The record number, array sequence and name are listed. Trace level is greater than 5.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

ARINIT02 - TOO MANY ARRAYS - NOT ENOUGH LOGICAL UNITS MXLUNA = <INTG>

MESSAGE TYPE: ERROR

CAUSE: Number of arrays exceeds allowed limit set by the maximum number of logical units, MXLUNA.

PROGRAM ACTION: Processing continues.

USER ACTION REQUIRED: A program limitation has been reached, see an SCT Engineer.

AROPEN01 - ERROR = <INTG> CALLED BY <CHAR> CONCERNING ARRAY <CHAR>  
UNABLE TO RECOGNIZE NAME

MESSAGE TYPE: ERROR

CAUSE: Error return from subroutine ARRCGZ.

PROGRAM ACTION: Processing is terminated, and the program returns to the calling routine.

USER ACTION REQUIRED: User must determine what is wrong with the database and correct it.

AROPEN03 - ERROR = <INTG> CALLED BY <CHAR> CONCERNING ARRAY <CHAR>  
READ ERROR ON LUN = <INTG>

MESSAGE TYPE: ERROR

CAUSE: While reading the array header, the operation failed.

PROGRAM ACTION: Processing is interrupted.

USER ACTION REQUIRED: Examine the file name and determine if the user has access to this file.

AROPEN04 - ERROR= <INTG> CALLED BY <CHAR> CONCERNING ARRAY <CHAR>  
HEADER READS <CHAR> <CHAR> <INTG> JUNK <INTG>  
JUNK JUNK <INTG> <INTG> <INTG> <INTG>  
<REAL> <REAL> <REAL> <REAL> <REAL> <REAL> <REAL> <REAL>  
ITODAY = <INTG>

MESSAGE TYPE: ERROR

CAUSE: Invalid header elements found in the array header.

PROGRAM ACTION: The file is not opened; processing continues normally.

USER ACTION REQUIRED: Copy the file anew and try again, the file may be out of date. If problem remains, contact an SCT Engineer.

AROPEN05 - ERROR= <INTG> CALLED BY <CHAR> CONCERNING ARRAY <CHAR>  
RECORD LENGTH MUST BE BETWEEN <INTG> AND <INTG>

MESSAGE TYPE: ERROR

CAUSE: Record length is out of bounds. Minimum is 3\*MXDIM and the maximum is MXREC.

PROGRAM ACTION: Processing is interrupted.

USER ACTION REQUIRED: A program limitation has been reached, see an SCT Engineer.

ARREAD01 - IP(4),NWD,IRET= <INTG><INTG><INTG><INTG><INTG><INTG>  
IREC,IWB,IAB,IRB= <INTG><INTG><INTG><INTG>

MESSAGE TYPE: DEBUG

CAUSE: The four parameters used to define the starting word for the array, the total number of words to be read and the current completion code are listed together with the record number, the starting word in the record and the current buffer element numbers. Debug level is 9.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

ARREAD02 - IREC,IWBEG,IWEND,LOC= <INTG> <INTG> <INTG> <INTG>

MESSAGE TYPE: DEBUG

CAUSE: Trace level is greater than 8.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

ARREAD03 - ERROR= <INTG> CALLED BY <CHAR> CONCERNING ARRAY <CHAR>  
UNABLE TO RECOGNIZE NAME

MESSAGE TYPE: ERROR

CAUSE: The subroutine ARRCGZ failed to recognize the named array.

PROGRAM ACTION: Process control is returned to the user.

USER ACTION REQUIRED: Enter the correct array name.

ARREAD04 - ERROR= <INTG> CALLED BY <CHAR> CONCERNING ARRAY <CHAR>  
THE <CHAR> SUBSCRIPT HAS A VALUE OF <INTG> IT SHOULD BE BETWEEN  
1 AND <INTG>

MESSAGE TYPE: ERROR

CAUSE: Invalid subscript values.

PROGRAM ACTION: Processing is interrupted.

USER ACTION REQUIRED: Invalid input file; see an SCT Engineer.

ARUSER01 - ERROR= <INTG> CALLED BY <CHAR> CONCERNING ARRAY <CHAR>  
UNABLE TO RECOGNIZE NAME

MESSAGE TYPE: ERROR

CAUSE: The subroutine ARRCGZ failed to recognize the named array.

PROGRAM ACTION: The coordinate definition is interrupted.

USER ACTION REQUIRED: Enter the correct array name.

ARUSER02 - ERROR= <INTG> CALLED BY <CHAR> CONCERNING ARRAY <CHAR>  
WEIRD DIMENSIONS --L, NDIM, DX= <INTG> <INTG> <REAL>

MESSAGE TYPE: ERROR

CAUSE: Invalid dimension data in array file.

PROGRAM ACTION: Access to the coordinate array is interrupted.

USER ACTION REQUIRED: Terminate process and restore array file.

ARUSER03 - NO PRIVILEGE FOR WRITE, CALLED BY <CHAR> CONCERNING ARRAY  
<CHAR> ACCESS PRIVILEGE IS <CHAR> IRET = <INTG>

MESSAGE TYPE: ERROR

CAUSE: User does not have write access to array file.

PROGRAM ACTION: Process is interrupted.

USER ACTION REQUIRED: If access is required, re-start with the Write option for this file.

ARWRIT01 - IP(4),NWD,IRET= <INTG><INTG><INTG><INTG><INTG><INTG>  
IREC,IWB,IAB,IRB= <INTG><INTG><INTG><INTG>

MESSAGE TYPE: DEBUG

CAUSE: Trace Level is greater than 8.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

ARWRIT02 - IREC,IWBEG,IWEND,LOC= <INTG><INTG><INTG><INTG>

MESSAGE TYPE: DEBUG

CAUSE: Trace Level is greater than 8.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

ARWRIT03 - ERROR <INTG> CALLED BY <CHAR> CONCERNING ARRAY <CHAR>  
UNABLE TO RECOGNIZE NAME

MESSAGE TYPE: ERROR

CAUSE: The subroutine ARRCGZ failed to recognize the named array.

PROGRAM ACTION: Process control is returned to the user.

USER ACTION REQUIRED: Enter the correct array name.

ARWRIT04 - ERROR = <INTG> CALLED BY <CHAR> CONCERNING ARRAY <CHAR>  
THE <CHAR> SUBSCRIPT HAS A VALUE OF <INTG> IT SHOULD BE  
BETWEEN 1 AND <INTG>

MESSAGE TYPE: ERROR

CAUSE: Invalid subscript values in file.

PROGRAM ACTION: Processing is interrupted.

USER ACTION REQUIRED: Invalid input file; obtain new copy of input file.

ARWRIT05 - ERROR - CALLED FROM <CHAR> NO PRIVILEGE FOR WRITE TO <CHAR>

MESSAGE TYPE: ERROR

CAUSE: User has to write access to the array file.

PROGRAM ACTION: Processing is interrupted.

USER ACTION REQUIRED: Re-start with the Write option for this file.

ASSET-01 - THREAT MODEL <CHAR> FOR ELINT REPORT <CHAR> NOT FOUND  
IN CORRELATION ARRAYS. THIS DEFENSE NOT PROCESSED.

MESSAGE TYPE: WARNING

CAUSE: The user entered an invalid defense type.

PROGRAM ACTION: Ignore input.

USER ACTION REQUIRED: Enter data again with a valid defense model  
type; examine TMDL in the database if required.

ASSET-02 - TOO MANY THREATS: NUMBER = <INTG> MAX = <INTG>

MESSAGE TYPE: ERROR

CAUSE: The number of defenses exceeds the maximum allowed during the  
execution of the LOCE Pre-processor.

PROGRAM ACTION: LOCE Pre-processing is terminated. Program execution  
continues at the SUPR Main menu.

USER ACTION REQUIRED: Issue the Update command to eliminate any  
correlated defenses and/or the Purge command to eliminate any  
obsolete defenses. Then repeat the LOCE command to complete Pre-  
processing the LOCE file.

ASSET-03 - THREAT ID ALREADY EXISTS: ID = <CHAR>

MESSAGE TYPE: ERROR

CAUSE: User entered a defense ID that matches an ID already in the  
database.

PROGRAM ACTION: Ignore the input.

USER ACTION REQUIRED: Enter the data again with a new defense ID.

ASSET-04 - ERROR IN ASSET

MESSAGE TYPE: ERROR

CAUSE: Could not recognize the internal command.

PROGRAM ACTION: Return to asset menu, no action taken.

USER ACTION REQUIRED: Inform SCT of the circumstances.



ASSET-05 - DATA ENTRY NOT COMPLETED

MESSAGE TYPE: INFORMATION

CAUSE:

PROGRAM ACTION:

USER ACTION REQUIRED: Contact an SCT Engineer.

ATBASE01 - BASE <CHAR> OUTSIDE SCENARIO

MESSAGE TYPE: ERROR

CAUSE: The specified base is outside the scenario boundaries.

PROGRAM ACTION: The program continues processing other bases.

USER ACTION REQUIRED: Either move the base inside the scenario or increase the scenario size to include the base location.

ATBASE05 - TOO MANY BASES -- CANNOT ADD <CHAR> TO TASK

MESSAGE TYPE: WARNING

CAUSE: The TASK array is not large enough to accomodate the number of bases in the scenario.

PROGRAM ACTION: The program continues processing, but will not task specified bases.

USER ACTION REQUIRED: Reduce the number of bases with units stationed at them or call an SCT Engineer and request the parameter be updated.

ATBASE06 - UNABLE TO RECOGNIZE NAME = <CHAR>  
BASE NODES NOT PROCESSED

MESSAGE TYPE: ERROR

CAUSE: The program is unable to recognize a base name.

PROGRAM ACTION: Base node processing is aborted.

USER ACTION REQUIRED: Contact an SCT Engineer.

ATBASE07 - THERE ARE NO RECORDS IN THE BASE TABLE  
BASE NODES NOT PROCESSED

MESSAGE TYPE: ERROR

CAUSE: There are no bases in the BASE table.

PROGRAM ACTION: Base node processing is aborted.

USER ACTION REQUIRED: Add bases to the BASE table.

ATBASE08 - CONSIDERING <INTG> BASES

MESSAGE TYPE: INFORMATION

CAUSE: Normal processing of bases.

PROGRAM ACTION: Continue processing.

USER ACTION REQUIRED: None.

ATTGT-01 - TARGET <CHAR> OUTSIDE STATESPACE

MESSAGE TYPE: WARNING

CAUSE: The specified target area is outside the statespace.

PROGRAM ACTION: The program continues processing.

USER ACTION REQUIRED: The user should either move the target inside the statespace or enlarge the statespace size to include the target area.

ATTGT-02 - TARGET <CHAR> NOT ADDED TO TASK -- NOT ENOUGH ROOM

MESSAGE TYPE: ERROR

CAUSE: Insufficient room in TASK array for all possibilities of targets.

PROGRAM ACTION: The program will not consider anymore targets for allocation.

USER ACTION REQUIRED: Reduce the number of targets with associated dmpis and contact an SCT Engineer to have the TASK array size enlarged.

ATTGT-03 - UNABLE TO RECOGNIZE NAME = <CHAR>  
TARGET NODES NOT PROCESSED

MESSAGE TYPE: ERROR

CAUSE: The program is unable to recognize a target name.

PROGRAM ACTION: Target node processing is aborted.

USER ACTION REQUIRED: Contact an SCT Engineer.

ATTGT-04 - THERE ARE NO <CHAR> RECORDS, TARGETS NOT PROCESSED

MESSAGE TYPE: ERROR

CAUSE: There are no target or dmpi records.

PROGRAM ACTION: The program ceases processing.

USER ACTION REQUIRED: Add some targets or dmpis to the empty tables.

ATTGT-12 - FLOT OR IFF-ON HAS AN INVALID NUMBER OF POINTS  
NPTS = <INTG> PLEASE DRAW OR INPUT A FLOT OR IFF-ON  
WITH BETWEEN 2 AND <INTG> POINTS

MESSAGE TYPE: ERROR

CAUSE: IFF-ON line or FLOT has too many points.

PROGRAM ACTION: Halts processing.

USER ACTION REQUIRED: Enter a new IFF-ON line using database. The new line should have fewer than NPTS points.

ATTGT-13 - FLOT OR IFF-ON HAS A LOOP, PLEASE GET ONE THAT  
DOES NOT DRAW OR INPUT A STRAIGHTER FLOT OR  
IFF-ON LINE

MESSAGE TYPE: ERROR

CAUSE: The IFF-ON line has a loop or very sharp angles in it.

PROGRAM ACTION: Halts processing.

USER ACTION REQUIRED: Input another IFF-ON line without a loop or with less sharp angles.

ATTGT-14 - UNABLE TO FIND A FLOT IN THE DATABASE.  
PLANNING WILL PROCEED ASSUMING THERE IS NO FLOT.

MESSAGE TYPE: WARNING

CAUSE: Unable to find a FLOT or IFF-ON line in the database.  
Either the FLOT.FIL file was not opened, or there is no data in it.

PROGRAM ACTION: Planning will continue assuming that there is no FLOT. Routing will be based on straight lines between the bases and tanker tracks to the targets.

USER ACTION REQUIRED: None. Planning will proceed. However, if you wish to have the FLOT considered in the plan, then please add one to the database. You may either add a FLOT or IFF-ON record to the FLOT table.

ATTGT-15 - CONSIDERING <INTG> TARGETS

MESSAGE TYPE: INFORMATION

CAUSE: Normal processing of the targets.

PROGRAM ACTION: Continue processing.

USER ACTION REQUIRED: None.

ATTRAK08 - UNABLE TO RECOGNIZE NAME = <CHAR>

MESSAGE TYPE: ERROR

CAUSE: Routine is unable to find a tanker track by the name specified in the TRAK table.

PROGRAM ACTION: Halts processing.

USER ACTION REQUIRED: Add a tanker track to the TRAK table with the name specified.

BROOT01 - BAD <CHAR> INDEX = <INTG>

MESSAGE TYPE: ERROR

CAUSE: Record Index of Staging Base is invalid.

PROGRAM ACTION: Return a bad completion code to the calling subroutine, either FNDCOR or GETRTS.

USER ACTION REQUIRED:

BFROOT02 - COULD NOT FIND CORRIDOR POINT <CHAR> FROM <CHAR> IN TREE

MESSAGE TYPE: ERROR

CAUSE: No valid match found in BAN tree list to define corridor.

PROGRAM ACTION: Return a bad completion code to the calling subroutine.

USER ACTION REQUIRED:

BFROOT03 - ERROR READING TREE DIRECTORY

MESSAGE TYPE: ERROR

CAUSE: The subroutine ARGET produced a bad completion code for the TREE file.

PROGRAM ACTION: Return a bad completion code to the calling subroutine.

USER ACTION REQUIRED:

BFROOT04 - ERROR READING <CHAR> TABLE

MESSAGE TYPE: ERROR

CAUSE: The sburoutine TBREAD produced a bad completion code.

PROGRAM ACTION: Return a bad completion code.

USER ACTION REQUIRED:

BFROOT05 - ERROR READING <CHAR> ARRAY

MESSAGE TYPE: ERROR

CAUSE: The subroutine ARGET produced a bad completion code for NLIS file.

PROGRAM ACTION: Return a bad completion code to the calling subroutine.

USER ACTION REQUIRED:

BFROOT06 - ERROR READING TREE <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The subroutine ARREAD produced a bad completion code.

PROGRAM ACTION: Return a bad comletion code the calling subroutine.

USER ACTION REQUIRED:

BROOT08 - COULD NOT FIND <CHAR> IN NLIS

MESSAGE TYPE: ERROR

CAUSE: Could not find index at root of the LLTR tree.

PROGRAM ACTION: Return a bad completion code

USER ACTION REQUIRED:

BGPERF01 - BAD INPUT: DIST, RATE = <REAL> <REAL>

MESSAGE TYPE: ERROR

CAUSE: Negative value for either traverse distance or speed entered.

PROGRAM ACTION: Set danger to -1. and interrupt the processing.

USER ACTION REQUIRED: Provide positive values of distance and speed.

BGPERF02 - CANNOT READ ALGP RECORD

MESSAGE TYPE: ERROR

CAUSE: The subroutine TBREAD produced a bad completion code.

PROGRAM ACTION: Enter a danger level of -1. and interrupt processing.

USER ACTION REQUIRED: See message from TBREAD for details on the failure.

BGPERF03 - BAD LAMBDA: ARMXAP= <REAL>

MESSAGE TYPE: ERROR

CAUSE: The value of ARMXAP is less than zero or more than 88.

PROGRAM ACTION: Enter a danger value of -1. and interrupt processing.

USER ACTION REQUIRED:

BGPERF04 - BAD TPLGN: TIME, ARMX, TPLGN = <REAL> <REAL> <REAL>

MESSAGE TYPE: ERROR

CAUSE: The product of time and lambda exceeds 1000., this creates the possibility of a value underflow.

PROGRAM ACTION: Enter a danger value of -1. and interrupt processing.

USER ACTION REQUIRED: Change the route path.

BGPERF05 - BAD DANGER: DIST, RATE, DANGER = <REAL> <REAL> <REAL>

MESSAGE TYPE: ERROR

CAUSE: The product of time and lambda is negative.

PROGRAM ACTION: Enter a danger value of -1. and interrupt processing.

USER ACTION REQUIRED: Since there is separate test for lambda, the recommended action is to try again.

BGPERF06 - DIST, RATE, DANGER = <REAL> <REAL> <REAL>

MESSAGE TYPE: DEBUG

CAUSE: Trace Level is greater than 8.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

BLDMSN03 - <INTG> MISSIONS BUILT TO TARGET <CHAR> VIA LLTR <CHAR>  
DMPI/# WEAPONS/WEAPON TYPE = <CHAR>/<INTG>/<CHAR>

MESSAGE TYPE: DEBUG

CAUSE: The debug level is greater than 5.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

BLDTRE01 - BUILDING TREE FOR TRANSIT CORRIDOR POINT <CHAR>

MESSAGE TYPE: DEBUG

CAUSE: The Trace Level is greater than 3.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

BLDTRE02 - <INTG> ID = <CHAR> DIST = <REAL> PRED = <INTG> # PREV = <INTG>

MESSAGE TYPE: DEBUG

CAUSE: The Trace Level is greater than 5.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

BSNODE01 - BASE <CHAR> OUTSIDE SCENARIO

MESSAGE TYPE: ERROR

CAUSE: Staging base coordinates are outside the scenario.

PROGRAM ACTION: Skip the processing for the current base. The return code is set to an invalid value; this value is returned after the last record is processed.

USER ACTION REQUIRED: Verify the base coordinates and scenario boundaries.

BSNODE02 - BASE <CHAR> HAS INVALID NUMBER OF TRANSIT CORRIDOR POINTS  
= <INTG>

MESSAGE TYPE: ERROR

CAUSE: The number of transit corridor points exceeds MXACTC or is negative.

PROGRAM ACTION: Skip the processing for the current base. The completion code is set to an invalid value.

USER ACTION REQUIRED:

BSNODE05 - TOO MANY BASES--CANNOT ADD <CHAR> TO NLIS

MESSAGE TYPE: WARNING

CAUSE: The number of bases exceeds MXBSNP; the number is re-set to MXBSNP.

PROGRAM ACTION: Processing for the current base is omitted.

USER ACTION REQUIRED:

BSNODE06 - UNABLE TO RECOGNIZE NAME = <CHAR>  
BASE NODES NOT PROCESSED

MESSAGE TYPE: ERROR

CAUSE: The subroutine TBRCGZ was unable to recognize the base file.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit BSNODE.

USER ACTION REQUIRED: Operational error. Verify file exists and is accessible and try again.



BSNODE07 - THERE ARE NO RECORDS IN THE BASE TABLE  
BASE NODES NOT PROCESSED

MESSAGE TYPE: ERROR

CAUSE: The BASE file has no records beyond the header record.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit BSNODE.

USER ACTION REQUIRED: Probably a bad input file; obtain a new copy of the file.

BSNODE08 - INVALID VALUE FOR NTBK = <INTG> PLEASE CHECK CURR  
BASE NODES NOT PROCESSED

MESSAGE TYPE: ERROR

CAUSE: The CURR File includes an invalid number for time blocks.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit BSNODE.

USER ACTION REQUIRED: Display the contents of the CURR file and replace it.

BSNODE09 - CANNOT RECOGNIZE PREFERRED TRANSIT CORRIDOR POINT <CHAR>  
FOR BASE <CHAR>

MESSAGE TYPE: WARNING

CAUSE: Nodes is unable to find a point in the CORR table corresponding to the name indicated.

PROGRAM ACTION: The program does not connect the base to the specified node.

USER ACTION REQUIRED: The user may ignore the problem (the base will be connected to the closest transit corridor point by the program), or he may add the point to the MIKE and CORR tables or he may change the point name in the BASE table.

BSNODE10 - INVALID VALUE FOR NTREE = <INTG> PLEASE CHECK CORR  
BASE NODES NOT PROCESSED

MESSAGE TYPE: ERROR

CAUSE: The CORR table is messed up.

PROGRAM ACTION: The program aborts base nodes processing.

USER ACTION REQUIRED: Detangle the CORR table. Make sure all the points in CORR are in MIKE, and that the corridors do not form loops.

BSNODE12 - POINT <CHAR> EXCEEDS BASE ACCESSIBILITY DISTANCE FOR  
BASE <CHAR> YET IT HAS BEEN MADE ACCESSIBLE

MESSAGE TYPE: WARNING

CAUSE: A preferred connection is dictated which exceeds the maximum distance constraint for base accessibility.

PROGRAM ACTION: Program makes the connection anyway.

USER ACTION REQUIRED: None.

BSNODE13 - <INTG> ACCESSIBLE POINTS REQUESTED FOR BASE <CHAR> BUT  
ONLY <INTG> FOUND

MESSAGE TYPE: WARNING

CAUSE: The program was unable to make the requested number of connections for this base into the transit corridor network.

PROGRAM ACTION: Continue processing.

USER ACTION REQUIRED: None.

BTROOT01 - BAD <CHAR> INDEX = <INTG>

MESSAGE TYPE: ERROR

CAUSE: The number of "TRAK" records exceeds out of bounds.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit BTROOT.

USER ACTION REQUIRED:

BTROOT02 - COULD NOT FIND CORRIDOR POINT <CHAR> FROM <CHAR> IN TREE

MESSAGE TYPE: ERROR

CAUSE: The CORNEE tree list does not include the current corn.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit BTROOT.

USER ACTION REQUIRED:

BTROOT03 - ERROR READING TREE DIRECTORY

MESSAGE TYPE: ERROR

CAUSE: The subroutine ARGET provided an invalid completion code.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit BTROOT.

USER ACTION REQUIRED:

BTROOT04 - ERROR READING <CHAR> TABLE

MESSAGE TYPE: ERROR

CAUSE: The subroutine TBREAD failed while trying to read the named table.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit BTROOT.

USER ACTION REQUIRED: Verify the file is accessible.

BTROOT05 - ERROR READING <CHAR> ARRAY

MESSAGE TYPE: ERROR

CAUSE: The subroutine ARGET failed while trying to read the named array.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit BTROOT.

USER ACTION REQUIRED: Verify the array file is accessible using the SHOW option.

BTROOT06 - ERROR READING TREE <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The subroutine ARREAD failed.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit BTROOT.

USER ACTION REQUIRED: The copy of the file may have a flaw, copy the file anew and repeat.

BYLL--01 - BAD DXGE (1) = <REAL> (2) = <REAL>

MESSAGE TYPE: ERROR

CAUSE: There is bad data in table GEOMS.

PROGRAM ACTION: Program terminates processing and returns to calling routine.

USER ACTION REQUIRED: User must correct the data in table GEOMS.

BYLL--02 - BAD AIRCRAFT TYPE ICATWC = <INTG>

MESSAGE TYPE: ERROR

CAUSE: Index ICATWC into aircraft type array is bad.

PROGRAM ACTION: Program terminates processing and returns to the calling menu.

USER ACTION REQUIRED: User must correct the data in table STWC.

BYLL--03 - POINT OUT OF STATESPACE FOR SEGMENT FROM  
<REAL> <REAL> TO <REAL> <REAL>

MESSAGE TYPE: ERROR

CAUSE: This route has way points that are outside the statespace.

PROGRAM ACTION: Program terminates processing and returns to calling menu.

USER ACTION REQUIRED: User must correct way points of route.

BYLL201 - BAD INPUT: NPTS, NPTSMX = <INTG> <INTG>

MESSAGE TYPE: ERROR

CAUSE: The number of points exceeds the maximum set by NPTSMX.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit BYLL2.

USER ACTION REQUIRED:

CALDAN01 - <CHAR> POINT HAS BAD COORDS LAT = <REAL> LON = <REAL>

MESSAGE TYPE: ERROR

CAUSE: Routine calling CALDAN contains bad arguments for latitude and longitude.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: Correct arguments in routine calling CALDAN.

CALDAN02 - INVALID RATE = <REAL> NM/SEC

MESSAGE TYPE: ERROR

CAUSE: Routine calling CALDAN contains bad arguments for aircraft velocity.

PROGRAM ACTION: Program terminates processing and returns to calling routine.

USER ACTION REQUIRED: User must correct arguments in routine calling CALDAN.

CALDAN03 - NEGATIVE DISTANCE BETWEEN TWO POINTS

MESSAGE TYPE: ERROR

CAUSE: Call to routine GCDIST has returned a negative distance.

PROGRAM ACTION: Program terminates processing and returns to calling routine.

USER ACTION REQUIRED: User must correct errors in routine GCDIST.

CHDANGO1 - VELOCITY IS LESS THAN OR EQUAL TO ZERO  
AIRCRAFT VELOCITY = <REAL>

MESSAGE TYPE: ERROR

CAUSE: The routine calling CHDANG has a bad calling argument.

PROGRAM ACTION: Terminates processing and returns to the calling routine.

USER ACTION REQUIRED: User must correct the arguments in routine calling CHDANG.

CHDANGO2 - BAD NOMINAL AIRCRAFT VELOCITY INDEX = <INTG>

MESSAGE TYPE: ERROR

CAUSE: There is a bad index into the aircraft tables.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User must correct the index ICATWC in table STWC.

CHDANGO3 - BAD AIRCRAFT VELOCITY <REAL>

MESSAGE TYPE: ERROR

CAUSE: There is bad velocity data in array VNOMJ.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User must correct the bad data in table DTNOM.

CHDANGO4 - IMIN,JMIN,ICTL,XALT <INTG> <INTG> <INTG> <REAL>  
DGR1 = <REAL> DANGRD = <REAL>

MESSAGE TYPE: DEBUG

CAUSE: The debug level is greater than 6.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

CHDANGO5 - DANGER TO PT. <REAL> <REAL> = <REAL>

MESSAGE TYPE: DEBUG

CAUSE: The debug level is greater than 6.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

CHDATE01 - LENGTH OF CHARACTER VARIABLE IN WHICH TO PLACE DATE  
IS TOO SMALL. LENGTH GIVEN = <INTG>. LENGTH NEEDED = 9

MESSAGE TYPE: ERROR

CAUSE: Length of the calling argument for character date is too short.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User must correct the arguments in the calling routine.

CHDATE02 - INAPPROPRIATE INTEGER FORM FOR DATE: <INTG>

MESSAGE TYPE: ERROR

CAUSE: Arguments containing dates have values that are outside physical bounds.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User must input the correct date values.

CHEKID01 - ERROR = <INTG> CALLED BY <CHAR>  
TYPE = <INTG> IS NOT A LEGAL TYPE

MESSAGE TYPE: WARNING

CAUSE: The current valid range is from 1 thru 7; this TYPE is out of bounds.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit CHEKID.

USER ACTION REQUIRED:

CHEKID02 - ERROR = <INTG> CALLED BY <CHAR>  
ID = <CHAR> # = <INTG> IS NOT A VALID ID #

MESSAGE TYPE: WARNING

CAUSE: The rules for the allowed types were not met.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit CHEKID.

USER ACTION REQUIRED:

CHGENV01 - ARRAY FMASK DIMENSIONS EXCEEDED

MESSAGE TYPE: ERROR

CAUSE: Trying to mask a threat who's range is greater than the dimensions allowed by the array FMSK.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: Possible course of action are to delete the threat, change the range of the threat, or to change the grid size of the statespace.

CHGENV02 - COULD NOT FIND MASKED THREAT RECORD, ITHREC = <INTG>

MESSAGE TYPE: ERROR

CAUSE: Program can't find the threat record in the TOBS file.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User will have to terrain mask the threat.

CHGENV03 - NO THREATS MASKED IN ARRAY "TOBS", NFXTBS = <INTG>

MESSAGE TYPE: ERROR

CAUSE: Threats have not been terrain masked.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User will have to terrain mask the threats.



CHGENV04 - THREAT <CHAR> MAKES A HOLE IN THE STATESPACE  
BUF (<INTG>) = <REAL>

MESSAGE TYPE: ERROR

CAUSE: The user is attempting to remove a threat/defense which does not exist in the database and statespace.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: Exit the program and begin processing with a valid (non-corrupted) set of files.

CHGSTC04 - THREAT <CHAR> MAKES A HOLE IN THE STATESPACE  
BUF (<INTG>) = <REAL>

MESSAGE TYPE: ERROR

CAUSE: The user is attempting to remove a threat/defense which does not exist in the database and statespace.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: Exit the program and begin processing with a valid (non-corrupted) set of files.

CHKCMN01 - CHARACTER PARAMETER OF TABLE <CHAR> DOES NOT AGREE  
WITH DEFINED LENGTH OF COMMON BLOCK. PLEASE RECONCILE.  
CHARACTER PARAMETER LENGTH = <INTG>  
CHARACTER COMMON LENGTH = <INTG>

MESSAGE TYPE: WARNING

CAUSE: Program detects inconsistency between the predefined character common length in PARM.CMN, and the actual length of the character common block.

PROGRAM ACTION: The program issues an error message and continues checking for inconsistent commons.

USER ACTION REQUIRED: The user should contact an SCT Engineer.

CHKCMN02 - NUMERIC PARAMETER OF TABLE <CHAR> DOES NOT AGREE  
WITH DEFINED LENGTH OF COMMON BLOCK. PLEASE RECONCILE.  
NUMERICAL PARAMETER LENGTH = <INTG>  
NUMERICAL COMMON LENGTH = <INTG>

MESSAGE TYPE: WARNING

CAUSE: Program detects inconsistency between the predefined numeric common length in PARM.CMN, and the actual length of the numeric common block.

PROGRAM ACTION: The program issues an error message and continues checking for inconsistent commons.

USER ACTION REQUIRED: The user should contact an SCT Engineer.

CHKPRM01 - CHARACTER PARAMETER OF TABLE <CHAR> DOES NOT AGREE  
WITH DEFINED LENGTH IN ZDEFTB. PLEASE RECONCILE.  
CHARACTER PARAMETER LENGTH = <INTG>  
CHARACTER ZDEFTB LENGTH = <INTG>

MESSAGE TYPE: WARNING

CAUSE: Program detects inconsistency between the predefined character common length in PARM.CMN, and the character common as declared by ZDEFTB.DAT.

PROGRAM ACTION: The program issues an error message and continues checking for inconsistent commons.

USER ACTION REQUIRED: The user should contact an SCT Engineer.

CHKPRM02 - NUMERIC PARAMETER OF TABLE <CHAR> DOES NOT AGREE  
WITH DEFINED LENGTH IN ZDEFTB. PLEASE RECONCILE.  
NUMERIC PARAMETER LENGTH = <INTG>  
NUMERIC ZDEFTB LENGTH = <INTG>

MESSAGE TYPE: WARNING

CAUSE: Program detects inconsistency between the predefined numeric common length in PARM.CMN, and the numeric common as declared by ZDEFTB.DAT.

PROGRAM ACTION: The program issues an error message and continues checking for inconsistent commons.

USER ACTION REQUIRED: The user should contact an SCT Engineer.

CHLDMS01 - ERROR IN CONVERSION OF LAT/LON

MESSAGE TYPE: ERROR

CAUSE: Invalid entry found in conversion of LAT/LON

PROGRAM ACTION: Program control returned to user.

USER ACTION REQUIRED: Enter valid LAT/LON value.

CHTIME01 - NUMBER OF HOURS EXCEED 168 (NUMBER OF HOURS IN WEEK)

MESSAGE TYPE: WARNING

CAUSE: The number of hours exceeds the current limit of 168.

PROGRAM ACTION: Interrupt processing and exit the subroutine CHTIME.

USER ACTION REQUIRED: Enter a smaller value.

CHTMHM01 - ERROR IN CONVERSION OF TIME

MESSAGE TYPE: ERROR

CAUSE: More than 47 hours or more than 59 minutes entered, or negative values.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit CHTMHM.

USER ACTION REQUIRED: Enter correct values.

CHTPLN01 - ERROR IN CONVERSION OF TIME INTO PLAN FORM

MESSAGE TYPE: ERROR

CAUSE: Error return from routine CHTMHM.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: Correct the error in the time conversion routine.

CNTALT01 - XO,YO,DX,DY,NX,NY= <REAL><REAL><REAL><REAL> <INTG><INTG>

MESSAGE TYPE: DEBUG

CAUSE: Shows terrain co-ordinate system, when debug level is greater than 4.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

CNTALT02 - NCONT = <INTG>

MESSAGE TYPE: DEBUG

CAUSE: Shows number of contour points, when debug level is greater than 7.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

CNTALT03 - ICONT (M,L), M=1,4, L=1,NCONT  
<INTG> <INTG> <INTG> <INTG>

MESSAGE TYPE: DEBUG

CAUSE: Shows coded contour points, when debug level is greater than 7.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

CNTALT04 - FCONT (M,L), M=1,2, L=1,NCONT  
<REAL> <REAL>

MESSAGE TYPE: DEBUG

CAUSE: Shows scaled contour points, when debug level is greater than 7.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

CNTALT05 - TERRAIN DATA CANNOT BE PLOTTED. EITHER SELECT A SUBSAMPLING RATIO >= <INTG> OR USE SCALING TO SELECT A SMALLER GEOGRAPHIC REGION.

MESSAGE TYPE: ERROR

CAUSE: The number of Terrain Samples per column exceeds the allowed maximum.

PROGRAM ACTION: Altitude contours are not displayed; program execution continues normally.

USER ACTION REQUIRED: Use the Display Scale command to specify a smaller plotting window, or select a larger subsampling ratio for plotting terrain data.

CNTCELO1 - NUMBER OF POINTS CALCULATED FOR THIS THREAT IS GREATER THAN THE THREAT ARRAY SIZE MXFIXD, NPTS = <INTG>,<INTG>

MESSAGE TYPE: ERROR

CAUSE: Number of points calculated for this threat is greater than the dimensions of the array MXFIXD, used to hold the data.

PROGRAM ACTION: Does an error return to the calling routine, and continues.

USER ACTION REQUIRED: Either redimension array MXFIXD, or change the size of the threat.

CNTDGR01 - NH,NV,LVSEG,NVSEG,NAVE,LREAD =  
<INTG> <INTG> <INTG> <INTG> <INTG> <INTG>

MESSAGE TYPE: DEBUG

CAUSE: Shows danger co-ordinate parameters, when debug level is greater than 7.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

CNTDGR02 - NCONT = <INTG>

MESSAGE TYPE: DEBUG

CAUSE: Shows number of contour points, when debug level is greater than 7.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

CNTDGR03 - ICONT (M,L), M=1,4, L=1,NCONT  
<INTG> <INTG> <INTG> <INTG>

MESSAGE TYPE: DEBUG

CAUSE: Shows coded contour points, when debug level is greater than 7.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

CNTDGR04 - FCONT (M,L), M=1,2, L=1,NCONT  
<REAL> <REAL> \_

MESSAGE TYPE: DEBUG

CAUSE: Shows scaled contour points, when debug level is greater than 7.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

CNTDGR05 - UNACCEPTABLE INPUT LEVEL = <REAL>

MESSAGE TYPE: ERROR

CAUSE: A danger contour level is less than 0 or greater than or equal to 1.

PROGRAM ACTION: Danger contours are not displayed; program execution continues normally.

USER ACTION REQUIRED: Select contour levels between 0 and 1.

CNTTHRO1 - ERROR -- CHOSEN THREATS NOT MASKED

MESSAGE TYPE: ERROR

CAUSE: Could not find selected threat record in TOBS file. Threat not terrain masked.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: Terrain mask selected threat.

CNTTHRO2 - ERROR -- NO THREATS MASKED

MESSAGE TYPE: ERROR

CAUSE: No threats in terrain masked file TOBS.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User must terrain mask the threats.

CONDRT01 - THE STRING YOU ENTERED EXCEEDS THE MAXIMUM NUMBER OF  
CHARACTERS ALLOWED FOR THIS ITEM. THE MAXIMUM IS: <INTG>

MESSAGE TYPE: ERROR

CAUSE: User has entered a character string that is longer than the selected item.

PROGRAM ACTION: Program returns to the previous menu and lets the user try again.

USER ACTION REQUIRED: Enter the correct number of characters for the item selected.

CONDRT02 - INCORRECT INTEGER TYPE ENTERED, TRY AGAIN

MESSAGE TYPE: ERROR

CAUSE: Type of user input item was not of integer.

PROGRAM ACTION: Program returns to previous menu and allows the user to try again.

USER ACTION REQUIRED: User must input an item of type integer.

CONDRT03 - INCORRECT REAL TYPE ENTERED, TRY AGAIN

MESSAGE TYPE: ERROR

CAUSE: Type of user input item was not of real.

PROGRAM ACTION: Program returns to previous menu and allows the user to try again.

USER ACTION REQUIRED: User must input an item of type real.

COVMAT01 - INVALID AZIMUTH = <REAL> DEG

MESSAGE TYPE: ERROR

CAUSE: Azimuth in routine call is outside the physical bounds of the universe.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: Correct the azimuth or correct the argument of the calling routine.

COVMAT02 - NEGATIVE SEMI-MAJOR AXIS LENGTH = <REAL> NM

MESSAGE TYPE: ERROR

CAUSE: Semi-negative axis has a negative length.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User must correct threat data.

COVMAT03 - NEGATIVE SEMI-MINOR AXIS LENGTH = <REAL> NM

MESSAGE TYPE: ERROR

CAUSE: Semi-minor axis has a negative length.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User must correct threat data.

COVMAT05 - COVARIANCE MATRIX HAS NEGATIVE EIGENVALUES  
CORRECTIVE ACTION HAS BEEN TAKEN

MESSAGE TYPE: WARNING

CAUSE: Threat data which has been input produces a negative eigenvalue in subroutine COVMAT. This is due to a poor specification of the major and minor axes of uncertainty. I.E. the uncertainty ellipse is ill-defined, or a numerical round off error has occurred.

PROGRAM ACTION: SUPR adjusts the off-diagonal elements of the covariance matrix in order to produce a well defined matrix. This is done automatically and should not impact the processing.

USER ACTION REQUIRED: Please check the input threat data do make sure that the major and minor axes of uncertainty are reasonable.



CREART01 - NEW REPORT <CHAR> CREATED

MESSAGE TYPE: INFORMATION

CAUSE: This message is written out when a report is completed.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

DBADD01 - EXITING BEFORE COMPLETING ADD TO <CHAR>.  
NO RECORDS ADDED

MESSAGE TYPE: WARNING

CAUSE: User selected the option to terminate the Record Add session.

PROGRAM ACTION: Control is returned to the user.

USER ACTION REQUIRED: Continue to the next step or repeat the Record Add process to the end.

DBADD02 - SUCCESSFULLY ADDED RECORD <INTG> TO <CHAR> TABLE

MESSAGE TYPE: INFORMATION

CAUSE: All the entries made and the record has been written to disk.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

DBCHAN02 - EXITING BEFORE COMPLETED CHANGE TO TABLE <CHAR>  
NO RECORDS CHANGED

MESSAGE TYPE: WARNING

CAUSE: User selected the option to exit instead of completing all entries.

PROGRAM ACTION: Return to previous menu.

USER ACTION REQUIRED: Continue to next step or repeat the previous one to completion.

DBCHAN03 - SELECTED RECORDS IN <CHAR> SUCCESSFULLY CHANGED

MESSAGE TYPE: INFORMATION

CAUSE: All entrie successfully entered; record changed.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

DBCOPY01 - NEW RECORD CREATED IN <CHAR> RECORD NUMBER IS: <INTG>

MESSAGE TYPE: INFORMATION

CAUSE: The record copy has been completed.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

DBCOPY02 - TABLE <CHAR> HAS FEWER THAN 2 RECORDS

MESSAGE TYPE: ERROR

CAUSE: Cannot copy a record from a table that has no data records.

PROGRAM ACTION: Re-display the list of tables.

USER ACTION REQUIRED: Enter another name or exit an obtain a copy that has the expected records.

DBDELE01 - SELECTED RECORDS IN <CHAR> SUCCESSFULLY DELETED.

MESSAGE TYPE: INFORMATION

CAUSE: No problems encountered in deleting the requested records.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

DBREC-01 - NO RECORDS IN TABLE <CHAR>, RETURNING TO MAIN MENU

MESSAGE TYPE: ERROR

CAUSE: There are no records in the selected table.

PROGRAM ACTION: Terminates processing and returns to main menu.

USER ACTION REQUIRED: User must put data into the selected table.

DBREC-02 - NO RECORDS IN TABLE <CHAR> SATISFYING CONDITIONS

MESSAGE TYPE: ERROR

CAUSE: There are no records in the selected table for the conditions.

PROGRAM ACTION: Terminates processing and returns to main menu.

USER ACTION REQUIRED: User must create records in the selected table for these conditions.

DBREC-03 - NO EC ROZ'S ON FOR ENTIRE TIME WINDOW CHOSEN  
NO OPTIONS CAN BE CREATED FOR NEXT MENU

MESSAGE TYPE: ERROR

CAUSE: User is trying to position EC aircraft and no options can be generated for the next menu (Select EC ROZ Menu). The options for the menu are supposed to be EC ROZ'S that are active for the entire TOT or FEBA crossing window.

PROGRAM ACTION: Program returns to previous menu.

USER ACTION REQUIRED: Either a change to the database or a change to the plan window time is needed. Check the FEAT table and make sure there are EC ROZ'S in it that are on for the entire time window you have entered.

DBRECS01 - NO RECORDS IN TABLE <CHAR>, RETURNING TO MAIN MENU

MESSAGE TYPE: ERROR

CAUSE: No records in selected table.

PROGRAM ACTION: Display main menu.

USER ACTION REQUIRED: Select new option.

DBRECS02 - INCORRECT FORM FOR RANGE--TRY AGAIN

MESSAGE TYPE: ERROR

CAUSE: Record range selected included header in record one.

PROGRAM ACTION: Display menu again.

USER ACTION REQUIRED: Select a range that begins with a number greater than one.

DBRECS04 - NO RECORDS IN TABLE <CHAR> SATISFYING CONDITIONS

MESSAGE TYPE: ERROR

CAUSE: No records in named table.

PROGRAM ACTION: Display main menu.

USER ACTION REQUIRED: Select new option.

DBRPRT01 - DELETION ABORTED, REPORT <CHAR> STILL ALIVE AND WELL

MESSAGE TYPE: INFORMATION

CAUSE: Error return from call to domenu. Report not deleted.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

DBRPRT02 - REPORT <CHAR> DELETED

MESSAGE TYPE: INFORMATION

CAUSE: This message is written out when a report is deleted.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

DBTEST01 - <INTG> TEST ITEMS IS THE MAXIMUM NUMBER WHICH MAY BE  
SELECTED EITHER CHOOSE DONE OR CLEAR OPTION

MESSAGE TYPE: WARNING

CAUSE: The user is attempting to select a number of test items which  
is greater than the allowed maximum.

PROGRAM ACTION: The test item is not accepted.

USER ACTION REQUIRED: Either select the Done or Clear option.

DBTEST02 - <INTG> LIST ITEMS IS THE MAXIMUM NUMBER WHICH MAY BE  
SELECTED EITHER CHOOSE DONE OR CLEAR OPTION

MESSAGE TYPE: WARNING

CAUSE: The user is attempting to select a number of list items which  
is greater than the allowed maximum.

PROGRAM ACTION: The list item is not accepted.

USER ACTION REQUIRED: Either select the Done or Clear option.

DBTEST03 - YOU HAVE ALREADY SELECTED <CHAR>.  
YOU MAY NOT SELECT THE SAME ITEM TWICE

MESSAGE TYPE: ERROR

CAUSE: In specifying a conditional test condition, the user has  
attempted to select the same item for two different tests to be  
"anded" together. This is illegal.

PROGRAM ACTION: The item is not accepted; the program stays at the  
Test Item Menu.

USER ACTION REQUIRED: Select a different item.

DBVALU01 - INCORRECT VALUE FOR SUBSCRIPT--TRY AGAIN

MESSAGE TYPE: ERROR

CAUSE: The subscript value was not entered in integer form.

PROGRAM ACTION: Repeat the menu display.

USER ACTION REQUIRED: Enter an integer value for a subscript.

DBVALU02 - INCORRECT VALUE FOR SUBSCRIPT--TRY AGAIN

MESSAGE TYPE: ERROR

CAUSE: Subscript value is out of bounds for vector.

PROGRAM ACTION: Repeat menu.

USER ACTION REQUIRED: Enter valid subscript number.

DBWRIT01 - <INTG> RECORDS SUCCESSFULLY WRITTEN

MESSAGE TYPE: INFORMATION

CAUSE: A Database Write command has been successfully completed.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: None

DCFLCT01 - PROBLEM DECONFLICTING TARGET <CHAR>

MESSAGE TYPE: WARNING

CAUSE: Unable to generate satisfactory TOT windows for this target.

PROGRAM ACTION: TOT time windows will overlap or be very short.

USER ACTION REQUIRED: Check the generated solution. If this solution is undesirable then do one of the following:

- 1) Widen the planning time window.
- 2) Enter TOT windows for the DMPis manually.
- 3) Relax any terminal area weather constraints which may be present.

DECVAL03 - ERROR DECODING VALUE FOR <CHAR>(<INTG>)

MESSAGE TYPE: ERROR

CAUSE: Invalid data type entered for the selected item.

PROGRAM ACTION: Redisplay menu.

USER ACTION REQUIRED: Enter number in valid format.

DECVAL04 - <INTG> CHARACTERS INPUT FOR <CHAR>(<INTG>)  
ONLY THE FIRST <INTG> CHARACTERS ARE USED

MESSAGE TYPE: WARNING

CAUSE: Number of characters for an item is greater than the number of characters allowed by the parser.

PROGRAM ACTION: Truncates the input character string to the allowed number of characters and continues processing.

USER ACTION REQUIRED: User can try again after processing is completed.

DEFFILO1 - CANNOT DEFINE MORE THAN <INTG> FILES

MESSAGE TYPE: ERROR

CAUSE: An attempt has been made to define more files than the maximum allowed.

PROGRAM ACTION: The file is not defined. Program execution continues normally.

USER ACTION REQUIRED: Determine why so many files are being defined. Re-execute the program defining fewer files.

DEFTRN01 - FLATMN, FLATMX, FLONMN, FLONMX = <REAL> <REAL> <REAL> <REAL>

MESSAGE TYPE: DEBUG

CAUSE: Trace level is greater than 5.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

DEFTRN02 - DXGE = <REAL>

MESSAGE TYPE: DEBUG

CAUSE: Trace level is greater than 5.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

DEFTRN03 - XOGE = <REAL>

MESSAGE TYPE: DEBUG

CAUSE: Trace level is greater than 5.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

DEPTRN04 - NIGE,NJGE,NKGE = <INTG> <INTG> <INTG>

MESSAGE TYPE: DEBUG

CAUSE: Trace level is greater than 5.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

DEPTRN05 - TOO MANY STATESPACE CELLS--LAT X LON = <INTG> <INTG>  
MAXIMA = <INTG> <INTG>

MESSAGE TYPE: ERROR

CAUSE: The Scenario has been set up with too many statespace cells in either latitude or longitude or both.

PROGRAM ACTION: The statespace cannot be built; control returns to the Supr Main menu.

USER ACTION REQUIRED: Select a smaller statespace by changing DELE, DELN, XMIN, XMAX, YMIN and/or YMAX in the ALGP table.

DELATK01 - UNACCEPTING MISSION <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: Program is unaccepting the specified attack mission.

PROGRAM ACTION: Unaccept mission.

USER ACTION REQUIRED: None.

DELEC-01 - UNACCEPTING EC MISSION <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: Program is unaccepting the specified EC mission.

PROGRAM ACTION: Unaccept mission.

USER ACTION REQUIRED: None.



DELMAN01 - DELETING MANUAL MISSION <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: Program is deleting the specified manually generated mission.

PROGRAM ACTION: Deletes the mission from the ROUT and MISN tables.

USER ACTION REQUIRED: None.

DELTNK01 - UNACCEPTING TANKER MISSION <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: The program is unaccepting the specified tanker mission.

PROGRAM ACTION: Unaccept mission.

USER ACTION REQUIRED: None.

DICONE01 - NO PLAN CURRENTLY DISPLAYED SO CANNOT SHOW EC CONES

MESSAGE TYPE: ERROR

CAUSE: No plan has been selected for display and debug level is six or greater.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User needs to select and display a plan, and then try again.

DICONE02 - PLAN <CHAR> DOES NOT HAVE ANY EC SUPPORT

MESSAGE TYPE: ERROR

CAUSE: No EC support was selected for this plan and debug level is six or greater.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: No user action required.

DICORRO1 - ERROR RETREIVING TREE DATA

MESSAGE TYPE: ERROR

CAUSE:

PROGRAM ACTION:

USER ACTION REQUIRED: Contact an SCT Engineer.

DICORRO2 - INDEXING ERROR FOR CORN

MESSAGE TYPE: ERROR

CAUSE:

PROGRAM ACTION:

USER ACTION REQUIRED: Contact an SCT Engineer.

DICORRO3 - ERROR UNPACKING ACCESSIBILITY DATA FROM CORN <INTG> TO  
CORN <INTG>

MESSAGE TYPE: ERROR

CAUSE:

PROGRAM ACTION:

USER ACTION REQUIRED: Contact an SCT Engineer.

DIMIKE01 - TOO MANY MIKE POINTS - CANNOT ADD <CHAR> TO LIST

MESSAGE TYPE: ERROR

CAUSE: Not enough room in the transit corridor network processing  
array to fit all the MIKE points.

PROGRAM ACTION: Halts processing.

USER ACTION REQUIRED: Contact an SCT Engineer to have the MIKE point  
list enlarged. Reduce number of MIKE points used by the CORR table.

DIMIKE03 - UNABLE TO RECOGNIZE NAME OF RECORD

MESSAGE TYPE: ERROR

CAUSE: Program was unable to find a MIKE point in the MIKE table.

PROGRAM ACTION: Halts processing.

USER ACTION REQUIRED: Ensure that all points in the CORR table are in the MIKE table.

DISPID01 - TOO MANY IDS - EXCEEDING LIMIT

MESSAGE TYPE: INFORMATION

CAUSE: The user has selected a set of IDs to display which exceeds the maximum number of IDs which are displayable.

PROGRAM ACTION: Will not include the item in the display list.

USER ACTION REQUIRED: See SCT for enlarging array size.

DISPLY01 - TERRAIN DISPLAY NOT ALLOWED AT CURRENT MAP SCALE DUE TO TIME CONSTRAINTS

MESSAGE TYPE: INFORMATION

CAUSE: The user has the current map scale at 1:1M or 1:500K.

PROGRAM ACTION: Will not display terrain contours.

USER ACTION REQUIRED: Change map scale to display contours.

DISPLY02 - PLAN NO LONGER VALID. PLEASE RE-ALLOCATE THROUGH PLAN

MESSAGE TYPE: ERROR

CAUSE: The user has updated the penetration altitude without updating the plan.

PROGRAM ACTION: Plan will not be displayed.

USER ACTION REQUIRED: Exit Display and enter Plan functions and then return to Display.

DISPLY03 - COULD NOT FIND A PLAN FOR DISPLAY

MESSAGE TYPE: INFORMATION

CAUSE: Internal error in finding the plan in the database.

PROGRAM ACTION: Will not display plan.

USER ACTION REQUIRED: Notify SCT.

DISPLY04 - PLEASE SELCT BEFORE THIS OPTION

MESSAGE TYPE: INFORMATION

CAUSE: The user wanted to display circles, exposure, or threat/defense IDs without selecting the threat/defenses.

PROGRAM ACTION: Will not display the selected item.

USER ACTION REQUIRED: Select the SELCT Threat/Defense option.

DISTOG01 - OPTION CHOSEN FOUND IN MENU BUT NOT IN DISPLAY OPTION  
LIST IN LIP ARRAY

MESSAGE TYPE: ERROR

CAUSE: Internal problem with menu structure and arrays.

PROGRAM ACTION: No action taken.

USER ACTION REQUIRED: Notify SCT.

DITIME01 - # TIME BLOCKS = <INTG>. IT MUST BE BETWEEN 1 & 8

MESSAGE TYPE: ERROR

CAUSE: Number of time blocks is out of bounds.

PROGRAM ACTION: Return to main menu.

USER ACTION REQUIRED: Re-enter the number of time blocks.

DOHELP01 - UNABLE TO OPEN HELPOUT AS INPUT

MESSAGE TYPE: INFORMATION

CAUSE: Error return on opening help file or reading from terminal.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

DOHELPO2 - HELP NOT AVAILABLE FOR <CHAR><CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: Help is not available for this menu.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

DOHELPO3 - NO FURTHER HELP INFORMATION AVAILABLE FOR THIS OPTION.

MESSAGE TYPE: INFORMATION

CAUSE: There is no further help information available for this option.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

DOHELPO4 - NO FURTHER HELP INFORMATION AVAILABLE FOR <CHAR><CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: There is no further help information available for this option.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

DOMENU03 - NO FOLLOWING PAGE OF MENU, YOU ARE ON LAST PAGE

MESSAGE TYPE: ERROR

CAUSE: The page counter matches the number of pages for current menu; the request for an additional page is invalid.

PROGRAM ACTION: Interpret the next atom or word entry.

USER ACTION REQUIRED: Enter a valid option.

DOMENU05 - YOU ENTERED THE COMMAND: <CHAR>  
THIS IS NOT ACCEPTABLE. TRY AGAIN.

MESSAGE TYPE: ERROR

CAUSE: An invalid command was entered.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine.

USER ACTION REQUIRED: Enter a valid option.

DOMENU06 - ERROR ENTERING PAGE NUMBER, TRY AGAIN

MESSAGE TYPE: ERROR

CAUSE: User typed in wrong format for page number.

PROGRAM ACTION: Reprompts user.

USER ACTION REQUIRED: Enter an integer number.

DPALG-01 - NP,I,JFOM,IICTL,ITRCST = <INTG> <INTG> <INTG> <INTG> <INTG>

MESSAGE TYPE: DEBUG

CAUSE: The debug level is greater than 8.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

DPALG-02 - PASS,NUMCH,LCHNG = <INTG> <INTG> <INTG>

MESSAGE TYPE: DEBUG

CAUSE: The debug level is greater than 5.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

DPALG-05 - CONVERGED AFTER <INTG> PASSES.

MESSAGE TYPE: DEBUG

CAUSE: This message is written out after the dynamic programming algorithm has converged on a route.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

DTNOMS01 - ERROR IN READING FROM FILE <CHAR>

MESSAGE TYPE: ERROR

CAUSE: Subroutine TBREAD returned an invalid completion code for named file.

PROGRAM ACTION: Set completion code invalid and exit DTNOMS.

USER ACTION REQUIRED: Enter valid file name.

ECTMDL05 - BAD ICATWC = <INTG>

MESSAGE TYPE: ERROR

CAUSE:

PROGRAM ACTION:

USER ACTION REQUIRED: Contact an SCT Engineer.

ECTMDL06 - BAD DEGRADE FACTOR = <REAL>

MESSAGE TYPE: ERROR

CAUSE: Program is unable to degrade a threat by the factor indicated.

PROGRAM ACTION: Halts processing.

USER ACTION REQUIRED: Ensure that all degrade factors in ECAC are between 0.0 and 1.0.

ENCVRT01 - UNABLE TO ENCODE VALUE, FORMAT NEEDED IS LONGER THAN  
SPACE GIVEN

MESSAGE TYPE: ERROR

CAUSE: The encode format for this variable is too short.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User will have to correct the variable size.

ENCVRT02 - ERROR TRYING TO ENCODE A CHARACTER VARIABLE  
VARIABLE MUST BE REAL. ITEM WAS: <CHAR>

MESSAGE TYPE: ERROR

CAUSE: Variable to be encoded is of type character instead of real  
or integer.

PROGRAM ACTION: Terminates processing and returns to calling program.

USER ACTION REQUIRED: User will have to correct the variable type.

ERSBOX01 - FILL EMPTY SPOT IN ARRAY

MESSAGE TYPE: INFORMATION

CAUSE: The program has to fill the empty spots when blitting.

PROGRAM ACTION: The program will fill the empty spots in the array.

USER ACTION REQUIRED: None.

FILPAG01 - INVALID NUMBER OF POINTS IN LLTR <CHAR> NPTS = <INTG>

MESSAGE TYPE: WARNING

CAUSE: Number of points in transit route exceeds MXPNTR.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required. User should  
check data in LLTR table.



FILPAG02 - UNABLE TO RECOGNIZE NAME = <CHAR>

MESSAGE TYPE: ERROR

CAUSE: (1) The subroutine TBRGZ failed to recognize: LLTR, THRT, PBOR, FEAT, or TRAK. (2) The subroutine TBREAD failed with table LLTR or TNOD.

PROGRAM ACTION: The invalid completion code is returned to the calling subroutine and the execution of FILPAG is terminated.

USER ACTION REQUIRED: Verify the input files are accessible.

FILPAG03 - NO MISSIONS WITH TARGET IN THIS TIME BLOCK  
PLEASE CHANGE TIME BLOCK AND TRY AGAIN

MESSAGE TYPE: ERROR

CAUSE: Displaying missions in wrong time block.

PROGRAM ACTION: Goes out of subroutine, without displaying any missions.

USER ACTION REQUIRED: To display missions, change time block associated with the missions of the target.

FIND--01 - ERROR IN GRAPHICS INPUT

MESSAGE TYPE: ERROR

CAUSE: GPINPT encountered a severe I/O error and returned a completion code of -1.

PROGRAM ACTION: Return the completion code from GPINPT to the calling subroutine and exit FIND.

USER ACTION REQUIRED:

FIND--02 - UNABLE TO RECOGNIZE TABLE <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The program has not opened the table indicated and cannot reference it.

PROGRAM ACTION: Halts processing.

USER ACTION REQUIRED: Contact the Database Administrator to enable the program to open the specified file.

FIND--04 - NO NODES FOR THIS TIME BLOCK

MESSAGE TYPE: WARNING

CAUSE: Marker ADIF indicates no nodes included.

PROGRAM ACTION: Set completion code to -7 and exit FIND.

USER ACTION REQUIRED: No action is required, if the warning was expected.

FLOTLN01 - UNABLE TO PROCESS IFF-ON BECAUSE NO <CHAR>S  
HAVE BEEN SUCCESSFULLY PROCESSED

MESSAGE TYPE: ERROR

CAUSE: The counters NBSNP and NTGNP are equal to zero. <NOTE> This message is 7100, the WRITE in line 355 refers to 7200??

PROGRAM ACTION: Set IONR and IOFFR to -1 and exit FLOTLN.

USER ACTION REQUIRED:

FLOTLN02 - UNABLE TO RECOGNIZE NAME <CHAR>

MESSAGE TYPE: ERROR

CAUSE: Subroutine TBRCGZ is unable to recognize the FLOT table.

PROGRAM ACTION: Set IONR and IOFFR to -1 and exit FLOTLN.

USER ACTION REQUIRED: Verify file FLOT is accessible.

FLOTLN03 - ERROR READING <CHAR>

MESSAGE TYPE: ERROR

CAUSE: Subroutine TBREAD failed while reading the table file FLOT.

PROGRAM ACTION: Set IONR and IOFFR to -1 and exit FLOTLN.

USER ACTION REQUIRED: Verify file FLOT is accessible.

FLOTLN05 - UNABLE TO DELETE RECORD <CHAR>

MESSAGE TYPE: ERROR

CAUSE: Subroutine TBDLET failed while deleting a record in table file FLOT.

PROGRAM ACTION: Set IONR and IOFFR to -1 and exit FLOTLN.

USER ACTION REQUIRED: Exit and verify FLOT file integrity, copy new one if necessary.

FLOTLN06 - UNABLE TO FIND THE IFF-ON  
PLEASE USE THE DRAW OR ADD COMMAND  
AND CREATE AN IFF-ON RECORD IN FLOT

MESSAGE TYPE: ERROR

CAUSE: NFLOT is equal to zero or the subroutine TBREAD failed while reading a record in the table file FLOT.

PROGRAM ACTION: Set IONR and IOFFR to -1 and exit FLOTLN.

USER ACTION REQUIRED: Use the Database option to add an IFF-ON record in FLOT table.

FLOTLN07 - MULTIPLE IFF-ONS IN FLOT  
PLEASE DELETE ALL BUT ONE

MESSAGE TYPE: ERROR

CAUSE: NFLOT is greater than one.

PROGRAM ACTION: Set IONR and IOFFR to -1 and exit FLOTLN.

USER ACTION REQUIRED: Delete all but one IFF-ON record from the FLOT table.

FLOTLN08 - CANNOT FIND WHICH SIDE IFF-ON LINE IS ON  
PLEASE LOOK AT FLOT, BASES, AND TARGETS  
BASES SHOULD BE ON ONE SIDE AND TARGETS  
ON THE OTHER, MORE OR LESS

MESSAGE TYPE: ERROR

CAUSE: Subroutine SIDELN returned SIDE equal to NULL or BAD instead of either LEFT or RIGHT.

PROGRAM ACTION: Set IONR and IOFFR to -1 and exit FLOTLN.

USER ACTION REQUIRED: Verify locations of IFF-ON, BASES and TARGETS.

FLOTLN09 - CANNOT WRITE OUT NEW FLOT RECORD

MESSAGE TYPE: ERROR

CAUSE: Subroutine TBWRIT failed while writing to the file FLOT.

PROGRAM ACTION: Set IONR and IOFFR to -1 and exit FLOTLN.

USER ACTION REQUIRED: Verify FLOT file contents.

FLOTLN10 - DELETING FLOT RECORD <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: Old FLOT records are being deleted from the FLOT table.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

FLOTLN11 - DELETING FLOT RECORD <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: Old IFF-OFF records are being deleted from the FLOT table.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

FLOTLN12 - IFF-ON HAS AN INVALID NUMBER OF POINTS NPTS = <INTG>  
PLEASE DRAW OR INPUT AN IFF-ON WITH BETWEEN 2 AND <INTG> POINTS

MESSAGE TYPE: ERROR

CAUSE: IFF-ON line in FLOT table contains too many or too few points.

PROGRAM ACTION: Processing stops.

USER ACTION REQUIRED: Redo IFF-ON line thru the Database option. If problem persists, contact an SCT Engineer.

FLOTLN13 - IFF-ON HAS A LOOP, PLEASE GET ONE THAT DOES NOT  
DRAW OR INPUT A STRAIGHTER IFF-ON

MESSAGE TYPE: ERROR

CAUSE: IFF-ON line loops.

PROGRAM ACTION: Processing stops.

USER ACTION REQUIRED: Take the loop out of the IFF-ON line.

FLOTLN14 - FLOT LINE HAS A LOOP, PLEASE GET ONE THAT DOES NOT  
PLEASE DRAW OR INPUT A STRAIGHTER IFF-ON

MESSAGE TYPE: ERROR

CAUSE: FLOT line drawn parallel to IFF-ON line, contains a loop.

PROGRAM ACTION: Processing stops.

USER ACTION REQUIRED: Reenter a straighter IFF-ON line.

FLOTLN17 - IFF-OFF LINE <CHAR> HAS A LOOP, PLEASE GET ONE THAT DOES NOT  
PLEASE DRAW OR INPUT A STRAIGHTER IFF-ON

MESSAGE TYPE: ERROR

CAUSE: Subroutine LOOPLN returned an INDEX code other than -1.

PROGRAM ACTION: Set completion code, IONR and IOFFR to -1 and exit  
FLOTLN.

USER ACTION REQUIRED: Try again.

FLOTLN18 - NO <CHAR> LINE IN FLOT TABLE  
PLEASE ADD OR DRAW ONE

MESSAGE TYPE: ERROR

CAUSE: Missing either an IFF-ON, IFF-OFF or FLOT line from the  
FLOT table.

PROGRAM ACTION: Processing stops.

USER ACTION REQUIRED: Enter an IFF-ON line.

FLOTLN19 - TOO MANY <CHAR> LINES IN FLOT TABLE  
PLEASE DELETE ALL BUT ONE

MESSAGE TYPE: ERROR

CAUSE: FLOT table contains more than one of the lines listed in the message.

PROGRAM ACTION: Processing stops.

USER ACTION REQUIRED: Delete all but one of the lines from the FLOT table.

FNDARCO1 - FROM <CHAR> (<INTG>) TO <CHAR> (<INTG>) FOR TYPE <CHAR>

MESSAGE TYPE: DEBUG

CAUSE: Trace level is greater than 6.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

FNDARCO2 - FOUND A BAD ARC

MESSAGE TYPE: ERROR

CAUSE: Not one simultaneous match was found for

- (1) IVEH equal to NAC, and
- (2) GRESS(J) equal to INROUT, in the range of J from 1 thru MXINEG, and
- (3) IACCRY(IACC) equal to the input INDX2.

PROGRAM ACTION: Set completion code invalid and exit FNDARC.

USER ACTION REQUIRED:

FNDARCO3 - NODE = <INTG> NOT IN NODE LIST FOR NODE = <INTG>

MESSAGE TYPE: ERROR

CAUSE: Array pointer is beyond the limits of 2 and MXTP.

PROGRAM ACTION: Set completion code invalid and exit FNDARC.

USER ACTION REQUIRED:

FNDCOR01 - BAD GENERIC AIRCRAFT INDEX = <INTG> NAC = <INTG>

MESSAGE TYPE: ERROR

CAUSE: Invalid aircraft index; value is beyond displayed limit of NACAP.

PROGRAM ACTION: Set invalid completion code and exit FNDCOR.

USER ACTION REQUIRED: Verify input vehicle type.

FNDCOR03 - BAD NALT = <INTG> MUST BE BETWEEN 1 AND <INTG>

MESSAGE TYPE: ERROR

CAUSE: Number of altitude levels beyond displayed maximum MXALTS.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit FNDCOR.

USER ACTION REQUIRED:

FNDCOR04 - ERROR READING <CHAR> TABLE

MESSAGE TYPE: ERROR

CAUSE: Subroutine TBREAD failed while reading the named table file.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit FNDCOR.

USER ACTION REQUIRED: Verify the named table is accessible.

FNDCOR05 - BAD PROFILE = <CHAR> FROM BASE <CHAR>

MESSAGE TYPE: ERROR

CAUSE: Named profile is neither HIGH nor LOW.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit FNDCOR.

USER ACTION REQUIRED: Select valid option.

FNDCOR06 - COULD NOT FIND <CHAR> IN LLTR <CHAR> CORR LIST

MESSAGE TYPE: ERROR

CAUSE: Invalid named FAN index.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit FNDCOR.

USER ACTION REQUIRED:

FNDCOR07 - BAD RATE = <REAL> FOR AIRCRAFT = <INTG>

MESSAGE TYPE: ERROR

CAUSE: Negative or zero velocity for aircraft.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit FNDCOR.

USER ACTION REQUIRED: Verify database in VHIMJ and VLOWMJ.

FNDCOR08 - BAD PATH DIRECTION = <CHAR>

MESSAGE TYPE: ERROR

CAUSE: Path direction is neither INGRESS nor EGRESS.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit FNDCOR.

USER ACTION REQUIRED:

FNDCOR09 - IMPENDING TRAJ ARRAY OVERFLOW MXTP = <INTG>

MESSAGE TYPE: ERROR

CAUSE: Trajectory array TXYTJ is about to exceed its limit.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit FNDCOR.

USER ACTION REQUIRED:



FNDCOR10 - NEGATIVE DISTANCE = <REAL>

MESSAGE TYPE: ERROR

CAUSE: Distance computed by GCDIST is negative.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit FNDCOR.

USER ACTION REQUIRED:

FNDCOR11 - BAD <CHAR> = <INTG> NPTS = <INTG> MAX = <INTG>

MESSAGE TYPE: ERROR

CAUSE:

PROGRAM ACTION:

USER ACTION REQUIRED: Contact an SCT Engineer.

FNDCOR91 - BAD ALTITUDE = <REAL>

MESSAGE TYPE: ERROR

CAUSE: Negative or zero altitude.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit FNDCOR.

USER ACTION REQUIRED: Enter positive value.

FNDPAG02 - STRING NOT FOUND -- PAGE NUMBER UNCHANGED

MESSAGE TYPE: ERROR

CAUSE: No match found in variable menu for word entered.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit FNDPAG.

USER ACTION REQUIRED: Enter valid option from selection displayed.

FNDPAG03 - STRING ENTERED IS BLANK, TRY AGAIN

MESSAGE TYPE: ERROR

CAUSE: User entered a blank character string.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit FNDPAG.

USER ACTION REQUIRED: Enter valid option keyword.

FNDPAG04 - STRING FOUND IN KEY: <CHAR>; NOW ON PAGE <INTG> OF MENU  
TYPE S4 . TO FIND NEXT OCCURRENCE OF STRING

MESSAGE TYPE: INFORMATION

CAUSE: Valid entry, the page number is equal to the completion code.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

FOPEN101 - THE FORTRAN INQUIRE STATEMENT PRODUCED AN ERROR  
ON LOGICAL UNIT <INTG>

MESSAGE TYPE: WARNING

CAUSE: The operating system was unable to determine whether or not a given logical unit was opened.

PROGRAM ACTION: The desired file cannot be opened. Program execution continues normally to the GETLUN03 error message.

USER ACTION REQUIRED: Contact a System Maintenance Engineer.

FOPEN102 - THE FORTRAN INQUIRE STATEMENT PRODUCED AN ERROR  
ON FILE <CHAR>

MESSAGE TYPE: WARNING

CAUSE: The operating system was unable to obtain information on a given file.

PROGRAM ACTION: The desired file cannot be opened. Program execution continues normally to the GETLUN03 error message.

USER ACTION REQUIRED: Contact a System Maintenance Engineer.

FOPEN103 - UNABLE TO FIND DIRECT-ACCESS FILE <CHAR>

MESSAGE TYPE: WARNING

CAUSE: Procedural error -- running the program from a directory without access to the file; or misspelling the name of the file.

PROGRAM ACTION: The desired file cannot be opened. Program execution continues normally to the GETLUN03 error message.

USER ACTION REQUIRED: Correct the procedural error.

FOPEN104 - INCORRECT RECORD LENGTH = <INTG> FOR FILE <CHAR>  
RECORD LENGTH SHOULD = <INTG>

MESSAGE TYPE: WARNING

CAUSE: Procedural error -- running the program using an obsolete set of files from a previous delivery.

PROGRAM ACTION: The desired file cannot be opened. Program execution continues normally to the GETLUN03 error message.

USER ACTION REQUIRED: Correct the procedural error.

FOPEN105 - UNABLE TO FIND SEQUENTIAL-ACCESS FILE <CHAR>

MESSAGE TYPE: WARNING

CAUSE: Procedural error -- running the program from a directory without access to the file; or misspelling the name of the file.

PROGRAM ACTION: The desired file cannot be opened. Program execution continues normally to the GETLUN03 error message.

USER ACTION REQUIRED: Correct the procedural error.

FTROOT01 - BAD <CHAR> INDEX = <INTG>

MESSAGE TYPE: ERROR

CAUSE: Invalid index entered for TRAK or DOP.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit FTROOT.

USER ACTION REQUIRED: Enter valid index.

FTROOT02 - COULD NOT FIND CORRIDOR POINT <CHAR> FROM <CHAR> IN TREE

MESSAGE TYPE: ERROR

CAUSE: Unable to find match for corridor point.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit FTROOT.

USER ACTION REQUIRED:

FTROOT03 - ERROR READING TREE DIRECTORY

MESSAGE TYPE: ERROR

CAUSE: Subroutine ARGET failed with array TREE.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit FTROOT.

USER ACTION REQUIRED:

FTROOT04 - ERROR READING <CHAR> TABLE

MESSAGE TYPE: ERROR

CAUSE: Subroutine TBREAD failed while reading the named table file.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit FTROOT.

USER ACTION REQUIRED: Verify the named table is accessible.

FTROOT05 - ERROR READING <CHAR> ARRAY

MESSAGE TYPE: ERROR

CAUSE: Subroutine ARGET failed while processing NLIS.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit FTROOT.

USER ACTION REQUIRED: Verify NLIS is accessible.

FTR00T06 - ERROR READING TREE <CHAR>

MESSAGE TYPE: ERROR

CAUSE: Subroutine ARREAD failed while reading TREE.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit FTR00T.

USER ACTION REQUIRED: Verify array file is accessible.

FTR00T08 - COULD NOT FIND <CHAR> IN NLIS

MESSAGE TYPE: ERROR

CAUSE: No match found in CORNEE for named index.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit FTR00T.

USER ACTION REQUIRED:

GEOMS-01 - \*\*\*\*\*  
GEOMS EXECUTING

MESSAGE TYPE: DEBUG

CAUSE: Start processing scenario geometry data. This will only print if the debug level is greater than 4.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

GEOMS-02 - STATESPACE NOT INSIDE SCENARIO

MESSAGE TYPE: ERROR

CAUSE: Some statespace boundary outside scenario.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit GEOMS.

USER ACTION REQUIRED: Verify boundaries of statespace and scenario.

GEOMS-03 - ERROR ON FILE NAME: <CHAR>

MESSAGE TYPE: ERROR

CAUSE: Subroutines TBREAD or TBWRIT failed while trying to use the ALGP file.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit GEOMS.

USER ACTION REQUIRED: Verify integrity of ALGP file.

GEOMS-05 - STATESPACE NOT INSIDE SCENARIO  
PLEASE RUN SUPR AND CORRECT PROBLEM

MESSAGE TYPE: ERROR

CAUSE: Test to verify statespace is within scenario.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit GEOMS.

USER ACTION REQUIRED: Execute SUPR to insure boundaries are within scenario.

GETARC01 - RETRIEVE TRAJECTORIES FROM <CHAR> TO <CHAR>  
TARGET: <CHAR> (<INTG>)

MESSAGE TYPE: DEBUG

CAUSE: Trace level is greater than 2.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

GETARC05 - ERROR FROM STATRD

MESSAGE TYPE: ERROR

CAUSE: Subroutine STATRD failed while reading the statespace file.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit GETARC. <NOTE> verify this.

USER ACTION REQUIRED:

GETARCO6 - BUILDING ARCS FOR TARGET: <CHAR> (<INTG>)

MESSAGE TYPE: INFORMATION

CAUSE: About to build the arcs for a target.

PROGRAM ACTION: Attempt to build the arcs for the target.

USER ACTION REQUIRED: None.

GETDGR01 - BAD INPUT: NPTS = <INTG>

MESSAGE TYPE: ERROR

CAUSE: Calling argument has a bad value for the number of way points for this route.

PROGRAM ACTION: Terminate processing and return to calling routine.

USER ACTION REQUIRED: User will have to check the number of way points for this route in the calling routine.

GETDGR02 - BAD INPUT: RATE = <REAL>

MESSAGE TYPE: ERROR

CAUSE: Calling argument has a bad value for the aircraft velocity rate.

PROGRAM ACTION: Terminate processing and return to calling routine.

USER ACTION REQUIRED: User will have to check the argument for the aircraft velocity rate in the calling routine.

GETFMT01 - INCOMPLETE OR INVALID FORMAT LINE. LINE IGNORED: <CHAR>

MESSAGE TYPE: WARNING

CAUSE: The program attempted to interpret an incomplete or invalid format line.

PROGRAM ACTION: The program issues an error message, and skips the section with the invalid format line.

USER ACTION REQUIRED: The user should check the input file to insure that the required fields are all present as defined in the documentation for the input processor being run, and that the correct item names are used as identifiers in the format line.

GETIME01 - BAD FORMAT FOR TIME--MUST BE hhmm.  
Examples: 0830 or 830 or 16 (for 0016)  
ACTUAL INPUT WAS <CHAR>

MESSAGE TYPE: WARNING

CAUSE: Error return from reading user input time.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should input time in correct format.

GETLUN01 - TRYING TO OPEN AN UNDEFINED FILE--TYPE=<CHAR> NAME=<CHAR>

MESSAGE TYPE: ERROR

CAUSE: The program attempted to open a file which has never been defined.

PROGRAM ACTION: The file is not opened. Program execution continues normally.

USER ACTION REQUIRED: Type the following command: S7 SP DE 7 DE 3 .  
This command will generate some useful debug information. Then show the logfile to an SCT Engineer.

GETLUN02 - NO LOGICAL UNITS AVAILABLE TO OPEN FILE--TYPE=<CHAR> NAME=<CHAR>

MESSAGE TYPE: ERROR

CAUSE: The program attempted to open a file, but there was not an available logical unit.

PROGRAM ACTION: The file is not opened. Program execution continues normally.

USER ACTION REQUIRED: Type the following command: S7 SP DE 7 DE 3 .  
This command will generate some useful debug information. Then show the logfile to an SCT Engineer.



GETLUN03 - ERROR TRYING TO OPEN FILE = <CHAR>  
TYPE = <CHAR>; NAME = <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The program encountered an error in attempting to open a file.

PROGRAM ACTION: The file is not opened. Program execution continues normally.

USER ACTION REQUIRED: Check for a procedural error. Perhaps, the filename was spelled incorrectly, or perhaps the run was being executed in a directory which did not have access to the file.

GETMNU01 - MENU <CHAR> NOT FOUND

MESSAGE TYPE: ERROR

CAUSE: Menu name entered by the calling subroutine does not match any element in the array NAMEMU.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit GETMNU.

USER ACTION REQUIRED: Software error, see an SCT Engineer.

GETMNU02 - ERROR IN MENU TYPE FOR MENU <CHAR>  
ERROR PROBABLY IN MENUIN.DAT

MESSAGE TYPE: ERROR

CAUSE: Menu type designation data found to be incompatible; error probably in the designation in the input file MENUIN.DAT

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit GETMNU.

USER ACTION REQUIRED: Verify the latest copy of MENUIN.DAT is in use. If it is, contact an SCT Engineer.

GETMOU01 - SELECT POINT WITH MOUSE...

MESSAGE TYPE: INFORMATION

CAUSE: The user has selected something that requires graphical input.

PROGRAM ACTION: None.

USER ACTION REQUIRED: Select a point with the mouse on the graphics screen.

GETMS101 - SELECT POINT WITH MOUSE...

MESSAGE TYPE: INFORMATION

CAUSE: The user has selected something that requires graphical input.

PROGRAM ACTION: None.

USER ACTION REQUIRED: Select a point with the mouse on the graphics screen.

GETMSN01 - NO MISSIONS CHOSEN

MESSAGE TYPE: INFORMATION

CAUSE: This message written out when user does not select a mission from the menu.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

GETMSN03 - NO MISSIONS CREATED FOR TARGET <CHAR>  
SELECT DIFFERENT TARGET

MESSAGE TYPE: ERROR

CAUSE: No missions exist for this target.

PROGRAM ACTION: Program returns the the MSSN Menu.

USER ACTION REQUIRED: The user may select another target or run the Plan function with an appropriate time window to create missions for this target.

GETNOD01 - ERROR RETRIEVING DATA FOR LLTR NODE <CHAR>

MESSAGE TYPE: WARNING

CAUSE: Program encountered an error while retrieving information on the lltr point named to calculate the closest transit corridor point.

PROGRAM ACTION: The program will skip processing of the current ll and resume processing the next lltr with the next line of the input ACO file.

USER ACTION REQUIRED: The user should check the database for the existence and accuracy of the named lltr point. If the error persists the user should contact an SCT Engineer.

GETNOD02 - ERROR WHILE RETRIEVING INFORMATION FOR MIKE POINT

MESSAGE TYPE: WARNING

CAUSE: Program encountered an error reading information from the transit corridor table while attempting to locate the closest mike point to a lltr point.

PROGRAM ACTION: The program will issue an error message and continue processing lltrs with the next line of the input file.

USER ACTION REQUIRED: Contact an SCT Engineer.

GETSEQ01 - BAD <CHAR> INDEX = <INTG>

MESSAGE TYPE: ERROR

CAUSE: The index to the CORNEE array for base or FEBA access node tree root is out of bounds set by NCORNP.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit GETSEQ.

USER ACTION REQUIRED: Contact an SCT Engineer.

GETSEQ02 - BAD DESTINATION = <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The destination code is not ROOT nor LEAF.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit GETSEQ.

USER ACTION REQUIRED: Contact an SCT Engineer.

GETSEQ03 - ROOT FOUND = <INTG> DOES NOT MATCH ROOT REQUESTED = <INTG>

MESSAGE TYPE: ERROR

CAUSE: Inconsistent root values.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit GETSEQ.

USER ACTION REQUIRED: Contact an SCT Engineer.

GETSEQ04 - IMPENDING KORNSQ OVERFLOW: NSEQ CANNOT EXCEED <INTG>

MESSAGE TYPE: ERROR

CAUSE: Next sequence number exceeds the value of MXPNTC.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit GETSEQ.

USER ACTION REQUIRED: Contact an SCT Engineer.

GETSEQ05 - ERROR READING <CHAR> ARRAY

MESSAGE TYPE: ERROR

CAUSE: ARGET failed for the NLIS file.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit GETSEQ.

USER ACTION REQUIRED: Contact an SCT Engineer.

GETSEQ06 - ERROR READING TREE <CHAR>

MESSAGE TYPE: ERROR

CAUSE: ARREAD failed while reading the TREE array.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit GETSEQ.

USER ACTION REQUIRED: Contact an SCT Engineer.

GPTXT01 - ERROR SPECIFYING CO-ORDINATE--TRY AGAIN

MESSAGE TYPE: ERROR

CAUSE: Bad format input of latitude or longitude

PROGRAM ACTION: Return to menu

USER ACTION REQUIRED: Type lat/lon in correct format

GRYSCL01 - SET TO GRAY SCALE FAILED

MESSAGE TYPE: INFORMATION

CAUSE: Tried to set the map to gray scale on the DISPLAY menu and it did not work.

PROGRAM ACTION: None.

USER ACTION REQUIRED: Try something else.

IDMTCH01 - COULD NOT RECOGNIZE TABLE NAME <CHAR>

MESSAGE TYPE: ERROR

CAUSE: A table name that is unrecognizable by the data base routine TBRGZ was passed to the routine IDMTCH.

PROGRAM ACTION: The routine IDMTCH will not create a match. This will have different consequences, depending on where the routine is called.

USER ACTION REQUIRED: Check that the table name written in the message is a table and that the table has been opened (Most likely by saying Yes to the initial prompt "Open old files?"). If you can not determine the cause, contact a SCT Engineer and provide them with a copy of the log file.

INCONE01 - EC ACFT <CHAR> HAS BAD <CHAR> = <REAL>

MESSAGE TYPE: ERROR

CAUSE: Calling argument has a bearing that is outside the physical bounds of the program.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should check arguments of calling routine.

INCONE02 - EC ACFT <CHAR> HAS BAD COORDS LAT = <REAL> LON = <REAL>

MESSAGE TYPE: ERROR

CAUSE: Calling argument has an EC aircraft position that is outside the physical bounds of the planet.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should check arguments of calling routine.

INCONE03 - THRT <CHAR> HAS BAD COORDS LAT = <REAL> LON = <REAL>

MESSAGE TYPE: ERROR

CAUSE: Threat position is outside the physical bounds of the planet.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should check the data in file THRT.

INCONE04 - NEGATIVE DISTANCE BETWEEN EC ACFT AND THRT

MESSAGE TYPE: ERROR

CAUSE: Routine GCDIST has returned a distance that is less than zero.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should check error in routine GCDIST.

INCONE05 - INVALID HEADING FROM EC ACFT TO THRT HDG = <REAL>

MESSAGE TYPE: ERROR

CAUSE: Heading from EC aircraft to the threat is outside the physical bounds of the program.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should check heading error in routine HEADNG.

INITAS01 - TOO MANY THREATS: NUMBER = <INTG> MAX = <INTG>

MESSAGE TYPE: ERROR

CAUSE: The number of threats exceeds the maximum allowed during the execution of the LOCE Pre-processor.

PROGRAM ACTION: LOCE Pre-processing is terminated. Program execution continues at the SUPR Main menu.

USER ACTION REQUIRED: Issue the Update command to eliminate any correlated threats, and/or the Purge command to eliminate any obsolete threats. Then repeat the LOCE command to complete Pre-processing the LOCE file.

INITMA01 - SET INTENSITY FAILED

MESSAGE TYPE: INFORMATION

CAUSE: The initial map display failed to set the map intensity.

PROGRAM ACTION: Cannot execute the Display functions.

USER ACTION REQUIRED: Notify SCT.

INITMA02 - DISPLAY COVERAGE FAILED

MESSAGE TYPE: INFORMATION

CAUSE: Map software could not find the required maps.

PROGRAM ACTION: No action taken.

USER ACTION REQUIRED: Check the map directory.

INITMA03 - OPEN COVERAGE FAILED

MESSAGE TYPE: INFORMATION

CAUSE: Map software could not find all of the required maps.

PROGRAM ACTION: No action taken.

USER ACTION REQUIRED: Check the map directory.

INITMA04 - CONNECT FAILED

MESSAGE TYPE: INFORMATION

CAUSE: Map software could not find the DAMM.

PROGRAM ACTION: No action taken.

USER ACTION REQUIRED: Notify SCT.

INITMA05 - START THE DAMM

MESSAGE TYPE: INFORMATION

CAUSE: The user wanted to display data and the DAMM was not running.

PROGRAM ACTION: No action taken.

USER ACTION REQUIRED: Open another text window and start the DAMM.

INNORD05 - THE MAXIMUM NUMBER OF WEAPONS TYPES HAS BEEN EXCEEDED.  
PROGRAM WILL CONTINUE PROCESSING, BUT WILL ONLY CONSIDER  
<INTG> TYPES OF WEAPONS.

MESSAGE TYPE: WARNING

CAUSE: The maximum number of weapon types has been exceeded.

PROGRAM ACTION: No action; it will just ignore the rest.

USER ACTION REQUIRED: Check to make sure this action is OK.

INNORD06 - TRACKING <INTG> TYPES OF WEAPONS AT <INTG> BASES

MESSAGE TYPE: INFORMATION

CAUSE: Doing weapons availability bookkeeping.

PROGRAM ACTION: Continue processing.

USER ACTION REQUIRED: None.

INTASK01 - UNABLE TO DEFINE FILE

MESSAGE TYPE: WARNING

CAUSE:

PROGRAM ACTION:

USER ACTION REQUIRED: Contact an SCT Engineer.

INTASK02 - UNABLE TO READ FILE <CHAR>

MESSAGE TYPE: ERROR

CAUSE: Either TBRCGZ or TBREAD failed while trying to process AIRS table file.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit INTASK.

USER ACTION REQUIRED: Contact an SCT Engineer.



INTASK03 - UNABLE TO WRITE FILE <CHAR>

MESSAGE TYPE: ERROR

CAUSE: Subroutine ARWRIT failed while trying to write to named file.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit INTASK.

USER ACTION REQUIRED: Contact an SCT Engineer.

INTASK04 - NUMBER OF UNITS EXCEEDS LIMIT

MESSAGE TYPE: ERROR

CAUSE: The number of AIRSTAR Units exceeds MXUNIT.

PROGRAM ACTION: Do not read any more records from AIRS.

USER ACTION REQUIRED:

INTENS01 - SET INTENSITY FAILED

MESSAGE TYPE: INFORMATION

CAUSE: The number the user put in for the intensity is invalid.

PROGRAM ACTION: None.

USER ACTION REQUIRED: Re-enter another intensity value.

ITMRT-01 - CHOOSING LAST ITEM WILL RESULT IN OVER <INTG> COLUMN OUTPUT.  
LINES WILL WRAP ON SCREEN

MESSAGE TYPE: WARNING

CAUSE: User has selected too many items to put on one line of a report.

PROGRAM ACTION: Program continues processing as is.

USER ACTION REQUIRED: Either no action, or choose fewer items.

ITMRT-02 - NUMBER OF KEYS IN MENU HAS REACHED OR EXCEEDED NUMBER  
ALLOWED NUMBER OF KEYS = <INTG> MAXIMUM NUMBER = <INTG>

MESSAGE TYPE: ERROR

CAUSE: This menu has more than the allowed number of keys.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should select fewer items for this menu.

ITMRT-03 - CHOOSING LAST ITEM CAUSES OUTPUT OVER <INTG> COLUMNS.  
THIS ITEM CANNOT BE CHOSEN WITHOUT CHANGING PREVIOUS CHOICES.  
NUMBER OF COLUMNS USED SO FAR = <INTG>

MESSAGE TYPE: ERROR

CAUSE: User has selected too many items for this table.

PROGRAM ACTION: Lets the user start over in selecting items for this table.

USER ACTION REQUIRED: Select a different number or set of items for this table.

ITMRT-04 - NUMBER OF COLUMNS IS INAPPROPRIATE  
ABORTING REPORT  
NCOL = <INTG>

MESSAGE TYPE: ERROR

CAUSE: The number of columns selected for this report is less than zero.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should check for error in column calculations.

ITMRT-05 - INAPPROPRIATE BOUNDS, LOWER BOUND IS HIGHER THAN UPPER BOUND  
LOWER BOUND IS: <CHAR> UPPER BOUND IS: <CHAR>  
TRY AGAIN!

MESSAGE TYPE: ERROR

CAUSE: Calculations of lower and upper bounds for columns is transposed.

PROGRAM ACTION: Let's user start over in selecting columns for report.

USER ACTION REQUIRED: Be more careful in selecting columns for report.

ITMRT-06 - INAPPROPRIATE BOUNDS, LOWER BOUND IS HIGHER THAN UPPER BOUND  
TRY AGAIN!

MESSAGE TYPE: ERROR

CAUSE: Calculations for lower and upper bounds of rows is transposed.

PROGRAM ACTION: Let's user reselect items for rows.

USER ACTION REQUIRED: User should be more careful about selecting items for rows.

ITMRT-08 - NO ITEMS TO SHOW, NONE HAVE BEEN SELECTED

MESSAGE TYPE: INFORMATION

CAUSE: User has not selected any items for this table.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

JMPWRT01 - FAILURE TO ENCODE ITEM INTO LINE  
ATTEMPT TO WRITE REPORT ABORTED

MESSAGE TYPE: ERROR

CAUSE: Error return from routine ENCVAl.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should check encoding error in routine ENCVAl.

JMPWRT03 - NO LINES IN REPORT

MESSAGE TYPE: ERROR

CAUSE: This report has no lines for output.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: Check current report or select another report.

LEGEND01 - ERROR IN INTERNAL WRITE STATEMENT CONVERTING  
CHARACTER TO INTEGER, CHECK VALUE OF <INTG>

MESSAGE TYPE: ERROR

CAUSE: The real-time WRITE command failed.

PROGRAM ACTION: Exit the subroutine LEGEND.

USER ACTION REQUIRED: Verify entry.

LEGEND02 - ERROR IN INTERNAL WRITE STATEMENT CONVERTING  
CHARACTER TO CHARACTER, CHECK VALUE OF <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The real-time WRITE command failed.

PROGRAM ACTION: Exit the LEGEND subroutine.

USER ACTION REQUIRED: Verify entry.

LEGEND03 - ERROR IN INTERNAL WRITE STATEMENT CONVERTING  
REAL TO CHARACTER, CHECK VALUE OF <REAL>

MESSAGE TYPE: ERROR

CAUSE: The real-time WRITE command failed.

PROGRAM ACTION: Exit the LEGEND subroutine.

USER ACTION REQUIRED: Verify entry.

LEGEND04 - UNABLE TO RECOGNIZE FEATURE TABLE

MESSAGE TYPE: ERROR

CAUSE: Subroutine TBRGZ failed to recognize the FEAT table.

PROGRAM ACTION: Exit the LEGEND subroutine.

USER ACTION REQUIRED: Contact an SCT Engineer.

LLCONVO1 - ERROR SPECIFYING CO-ORDINATE--TRY AGAIN

MESSAGE TYPE: ERROR

CAUSE: The user did not employ one of the acceptable formats for entering latitude/longitude or UTM co-ordinate.

PROGRAM ACTION: The co-ordinate is not accepted. Program execution continues from the Latlon Value menu.

USER ACTION REQUIRED: Enter the co-ordinate correctly.

LOCATIO1 - SELECT POINT WITH MOUSE...

MESSAGE TYPE: INFORMATION

CAUSE: The user has selected something that requires graphical input.

PROGRAM ACTION: None.

USER ACTION REQUIRED: Select a point with the mouse on the graphics screen.

LSTWRT01 - NO CONNECTION BETWEEN TABLES <CHAR> AND <CHAR>  
ATTEMPT TO WRITE REPORT ABORTED

MESSAGE TYPE: ERROR

CAUSE: There are no connecting links between table 2 and 3 in this report.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should select a new set of tables.

LSTWRT02 - POINTER ITEM <CHAR> NOT FOUND IN TABLE <CHAR>  
ATTEMPT TO WRITE REPORT ABORTED

MESSAGE TYPE: ERROR

CAUSE: Error return from routine IMRCGZ. No pointer item into table two/three.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User needs to select different tables and items.

LSTWRT03 - FAILURE TO ENCODE VALUE FOR POINTER ITEM  
ATTEMPT TO WRITE REPORT ABORTED

MESSAGE TYPE: ERROR

CAUSE: Error return from routine ENCVAl.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should check encoding error in routine ENCVAl.

MAKELN01 - SORRY, CANNOT MAKE A LINE

MESSAGE TYPE: ERROR

CAUSE: (1) SIDE is neither RGHT nor LEFT; (2) Number of points is out of bounds, or (3) the subroutine LINBOX returned IFLAG not equal to 1.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit MAKELN.

USER ACTION REQUIRED: Contact an SCT Engineer.

MGCNVT01 - N,DIST,TIME = <INTG> <REAL> <REAL>

MESSAGE TYPE: DEBUG

CAUSE: Trace level greater than 5.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

MGNXTP01 - FIS,FJS,FIT,FJT,WT1,L1 =  
<REAL> <REAL> <REAL> <REAL> <REAL> <INTG>

MESSAGE TYPE: DEBUG

CAUSE: This is the first execution and the Trace Level is greater than 5.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

MGNXTPO2 - FIN,FJN,DGR1,DGR,HCOM,ITARG =  
<REAL> <REAL> <REAL> <REAL> <REAL> <INTG>

MESSAGE TYPE: DEBUG

CAUSE: The Trace Level is greater than 5.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

MGRCTPO1 - N,DGR,TXYTJ = <INTG> <REAL> <REAL>

MESSAGE TYPE: DEBUG

CAUSE: The Trace Level is greater than 5.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

MGRCTPO2 - NUMBER TURN PTS IN ARC EXCEEDS MXTP = <INTG>  
PROBABLE CAUSE IS NEGATIVE VALUES IN THE STATESPACE  
PLEASE CHECK THE STATESPACE

MESSAGE TYPE: ERROR

CAUSE: Probably removed threat more than once from statespace creating bad statespace.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit MGRCTP.

USER ACTION REQUIRED: Contact an SCT Engineer.

MHDRRT01 - SUCCESSFULLY MODIFIED HEADERS FOR REPORT <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: This message is written out when a report header has been modified.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

MIDWRT01 - NO CONNECTION BETWEEN TABLES <CHAR> AND <CHAR>  
ATTEMPT TO WRITE REPORT ABORTED

MESSAGE TYPE: ERROR

CAUSE: There is no connect between tables 1 and 2 in this report.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should reselect tables and items for this report.

MIDWRT02 - POINTER ITEM <CHAR> NOT FOUND IN TABLE <CHAR>  
ATTEMPT TO WRITE REPORT ABORTED

MESSAGE TYPE: ERROR

CAUSE: Error return from routine IMRCGZ. No index for pointer item in table one/two.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should reselect tables and items.

MIDWRT03 - FAILURE TO ENCODE VALUE FOR POINTER ITEM  
ATTEMPT TO WRITE REPORT ABORTED

MESSAGE TYPE: ERROR

CAUSE: Error return from routine ENCVAl.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should check encoding error in routine ENCVAl.

MISSON02 - NO LLTR ACCESSIBLE TO TARGET: <CHAR>  
PLEASE CHECK LLTRS, ACO LINES, AND TIME WINDOWS

MESSAGE TYPE: WARNING

CAUSE: The number of LLTR accessible to the target is zero.

PROGRAM ACTION: No missions considered for this target.

USER ACTION REQUIRED: Check time on target, windows in DMPI table and LLTR table.



MISSON05 - UNABLE TO FIND AIRCRAFT TYPE <CHAR> IN ACFT TABLE

MESSAGE TYPE: WARNING

CAUSE: Subroutine TBREAD failed while using the ACFT table for the named aircraft type.

PROGRAM ACTION: Continues processing.

USER ACTION REQUIRED: Check the ACFT table and the tasking.

MISSON06 - CANNOT MATCH GENERIC AIRCRAFT TYPE FOR VEHICLE <CHAR>

MESSAGE TYPE: WARNING

CAUSE: Subroutine MATCH returned an invalid completion code because there was no match with generic aircraft type.

PROGRAM ACTION: Continue processing.

USER ACTION REQUIRED: Check ACFT table.

MISSON07 - <INTG> MISSIONS GENERATED FOR TARGET: <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: Number of missions equal to zero.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

MISISON08 - TOO MANY DMPIS ASSIGNED TO TARGET: <CHAR>  
DMPI <CHAR> WILL BE IGNORED

MESSAGE TYPE: WARNING

CAUSE: There is not enough room in the MISN array to store the data for all of the dmpis assigned to this target.

PROGRAM ACTION: The program will procede, but this DMPI will not be considered in the allocation.

USER ACTION REQUIRED: There are several options:

- (1) Reduce the number of DMPIS assigned to this target by deleting some DMPIS.
- (2) Reduce the number of DMPIS assigned to this target by creating a new target and assigning some of these DMPIS to it.
- (3) Continue planning and accept the plan. Accepted DMPIS are ignored during mission generation and you will be allowed to continue.

MISISON09 - GENERATING CANDIDATE MISSIONS FOR TARGET: <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: It is necessary to generate candidate missions in order to produce an allocation of attack aircraft to targets.

PROGRAM ACTION: Candidate missions are generated. This will require several minutes of processing time.

USER ACTION REQUIRED: Please stand by. The solution will be ready in a few minutes. If more than twenty DMPIS are being considered, then a trip to the coffee pot may be appropriate.

MISISON11 - NO MISSIONS GENERATED FOR TARGET: <CHAR>  
- NO VALID WEAPONERING SOLUTIONS FOR THE  
UNACCEPTED DMPIS

MESSAGE TYPE: INFORMATION

CAUSE: Attempted to build candidate missions for this target's unaccepted DMPIS. However, none of these DMPIS have any valid weaponering solutions.

PROGRAM ACTION: Try and construct candidate missions for the next target. Proceede with the allocation.

USER ACTION REQUIRED: Review the records in the DMPI table which correspond to this target. Please make sure that these DMPIS go through the WEAPONERING function with at least one viable solution.

MISISON12 - NO MISSIONS GENERATED FOR TARGET: <CHAR>  
- NO UNACCEPTED DMPIS CONSISTENT WITH THE CURRENT PLANNING  
TIME WINDOW.

MESSAGE TYPE: INFORMATION

CAUSE: The current planning time window is incompatible with the  
DMPI time on target time windows for this target.

PROGRAM ACTION: Continue with mission generation for the next  
target and continue with the allocation.

USER ACTION REQUIRED: None. However, note that no DMPIS for this  
target will be considered by the M-on-N algorithm.

MISISON13 - NO MISSIONS GENERATED FOR TARGET: <CHAR>  
- PLEASE REVIEW DMPI TABLE AND TIME WINDOWS

MESSAGE TYPE: INFORMATION

CAUSE: Unable to generate any candidate missions for this target.  
The reason may be due to DMPI TOT windows inconsistent with the  
planning time window or no viable weaponeering solutions.

PROGRAM ACTION: Continue generating missions for the next target,  
then continue with the allocation.

USER ACTION REQUIRED: None. However, note that no DMPIS for this  
target will be considered for allocation.

MISISON14 - NO MISSIONS WILL BE GENERATED FOR DMPI <CHAR>  
CANNOT FIND AN EGRESS LLTR CONSISTENT WITH THE  
PLANNING TIME WINDOW. PLEASE TRY ANOTHER PLANNING WINDOW.

MESSAGE TYPE: WARNING

CAUSE: The planning time window, the DMPI TOT window, and the  
egress LLTR start and end times are such that the program cannot find  
a route.

PROGRAM ACTION: Continue with the next DMPI.

USER ACTION REQUIRED: Try another time window. Try and avoid  
planning time window that are close to LLTR start and end times.

MITMRT01 - NEW REPORT <CHAR> CREATED

MESSAGE TYPE: INFORMATION

CAUSE: This message is written out when a new report is created.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

MKABOX01 - BAD BOX LENGTH OR WIDTH WIDTH = <REAL> LENGTH = <REAL>

MESSAGE TYPE: WARNING

CAUSE: One dimension is equal or less than zero.

PROGRAM ACTION:

USER ACTION REQUIRED:

MKABOX02 - BAD BOX AZIMTH = <REAL>

MESSAGE TYPE: WARNING

CAUSE: Azimuth value is out of bounds.

PROGRAM ACTION: Redefine box.

USER ACTION REQUIRED: Redefine box.

MKABOX03 - BAD BOX CENTER LATITUDE = <REAL>

MESSAGE TYPE: WARNING

CAUSE: Latitude is out of bounds.

PROGRAM ACTION: Redefine box.

USER ACTION REQUIRED: Redefine box.

MKABOX04 - BAD BOX CENTER LONGITUDE = <REAL>

MESSAGE TYPE: WARNING

CAUSE: Invalid value of longitude. <NOTE> Wrong argument, CLAT in lieu of CLON.

PROGRAM ACTION: Re-define box

USER ACTION REQUIRED: Re-define box.

MKABOX05 - BOX ALGORITHM WILL NOT WORK AT POLES

MESSAGE TYPE: WARNING

CAUSE: Zero latitude.

PROGRAM ACTION: Re-define box.

USER ACTION REQUIRED: Re-define box.

MKASEG01 - BAD LINE SEGMENT LENGTH = <REAL>

MESSAGE TYPE: WARNING

CAUSE: Negative distance.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit MKASEG.

USER ACTION REQUIRED: Contact an SCT Engineer.

MKASEG02 - BAD LINE SEGMENT AZIMUTH = <REAL>

MESSAGE TYPE: WARNING

CAUSE: Azimuth is out of bounds

PROGRAM ACTION:

USER ACTION REQUIRED:

MKASEG03 - BAD SEGMENT ENDPOINT LATITUDE = <REAL>

MESSAGE TYPE: WARNING

CAUSE: Latitude greater than 90.0

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit MKASEG.

USER ACTION REQUIRED: Contact an SCT Engineer.

MKASEG04 - BAD SEGMENT ENDPOINT LONGITUDE <REAL>

MESSAGE TYPE: WARNING

CAUSE: Longitude greater than 180.0

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit MKASEG.

USER ACTION REQUIRED: Contact an SCT Engineer.

MKASEG05 - ALGORITHM WILL NOT WORK AT POLES

MESSAGE TYPE: WARNING

CAUSE: Latitude is zero.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit MKASEG.

USER ACTION REQUIRED: Contact an SCT Engineer.

MNFIND01 - ERROR IN GRAPHICS INPUT

MESSAGE TYPE: ERROR

CAUSE: Error in calling gpintp using the cursor or with calling MILTRN in transforming raster to lat/lon.

PROGRAM ACTION: Gets out and goes to back to menu before.

USER ACTION REQUIRED: Check GKS calls or screen coordinates.

MNINIT01 - MANUAL MODIFICATIONS TO THIS MISSION ARE NOT ALLOWED  
BECAUSE THIS MISSION IS PART OF AN ACCEPTED PLAN.  
PLEASE UNACCEPT PLAN <CHAR> OR SELECT ANOTHER MISSION

MESSAGE TYPE: INFORMATION

CAUSE: The user has attempted to modify a mission which is part of an accepted plan.

PROGRAM ACTION: Return to the MANUAL menu.

USER ACTION REQUIRED: The user may either unaccept the accepted plan (whose ID is shown), try another mission, or build a new mission.

MNPLAN01 - DMPI <CHAR> IS ALREADY PART OF AN ACCEPTED PLAN  
THIS MISSION WILL NOT BE ADDED TO PLAN <CHAR>

MESSAGE TYPE: WARNING

CAUSE: The planner has manually built a mission to a DMPI which is already part of an accepted plan.

PROGRAM ACTION: The manual mission will not be added to the given plan record. The manual mission and route are saved, but not as part of this plan.

USER ACTION REQUIRED: None. However, the user may want to un-accept the plan containing the mission to this DMPI and then try to accept this record again.

MNPLAN02 - THIS IS AN ACCEPTED PLAN, MISSION <CHAR> WILL NOT BE ADDED

MESSAGE TYPE: WARNING

CAUSE: The planner has build a manual route within an accepted plan.

PROGRAM ACTION: The program will not add the manual route to the current plan.

USER ACTION REQUIRED: None. However, the user may wish to un-accept this plan an go through manual again. The manual route in question will be saved.

MNPLAN03 - NOT ENOUGH ROOM IN THE PLAN TABLE TO STORE THIS ATTACK MISSION

MESSAGE TYPE: WARNING

CAUSE: Number of attack missions exceeds the maximum number allowed.

PROGRAM ACTION: Do not store this manual mission in the plan table.

USER ACTION REQUIRED: Please create a new plan record and add the manual mission to it.

MNPROMO1 - YOU MAY NOT BUILD A MANUAL MISSION TO THIS DMPI  
BECAUSE IT HAS ALREADY BEEN TASKED IN AN ACCEPTED PLAN.  
PLEASE SELECT AN UNACCEPTED DMPI.

MESSAGE TYPE: INFORMATION

CAUSE: The user has attempted to manually build a mission to a DMPI which has already been tasked within an accepted plan.

PROGRAM ACTION: The user is returned to the DMPI menu.

USER ACTION REQUIRED: Either select another DMPI, or unaccept the plan containing this DMPI.

MNPROMO2 - THIS TOT IS NOT WITHIN THE CURRENT PLANNING DAY.  
PLEASE ENTER A TIME BETWEEN <CHAR> AND <CHAR>

MESSAGE TYPE: WARNING

CAUSE: The user is planning a manual mission. Prompted the user for a time on target for this mission. The user has entered a TOT which is not within the current planning day.

PROGRAM ACTION: Return to the Manual Time on Target Menu.

USER ACTION REQUIRED: Select a time on target that is in the current planning day. The beginning and end of the current planning day are shown as a guide.

MNPROMO3 - THIS IS NOT AN ACCEPTABLE TIME WINDOW. THE TOT TIME WINDOW  
MUST BE A POSITIVE WHOLE NUMBER. FOR EXAMPLE, A VALUE OF 10  
WILL GIVE YOU A TEN MINUTE TIME WINDOW.

MESSAGE TYPE: WARNING

CAUSE: The user has input a bad value for TOT time window duration.

PROGRAM ACTION: The Manual TOT time window duration menu will be reissued.

USER ACTION REQUIRED: Please enter the length of the time window. This should be a positive whole number. Any value from "1" to "10080" will be accepted.



MODIFY01 - THREAT MODEL <CHAR> FOR ELINT REPORT <CHAR> NOT FOUND  
IN CORRELATION ARRAYS. THIS THREAT NOT PROCESSED.

MESSAGE TYPE: WARNING

**CAUSE:** The user entered an invalid defense type.

PROGRAM ACTION: Ignore input.

USER ACTION REQUIRED: Enter data again with a valid defense model type; examine TMDL in the database if required.

MODIFY02 - TOO MANY THREATS: NUMBER = <INTG> MAX = <INTG>

MESSAGE TYPE: ERROR

CAUSE: The number of defenses exceeds the maximum allowed during the execution of the LOCE Pre-processor.

PROGRAM ACTION: LOCE Pre-processing is terminated. Program execution continues at the SUPR Main menu.

USER ACTION REQUIRED: Issue the Update command to eliminate any correlated defenses, and/or the Purge command to eliminate any obsolete defenses. Then repeat the LOCE command to complete Pre-processing the LOCE file.

MODIFY03 - THREAT ID ALREADY EXISTS: ID = <CHAR>

MESSAGE TYPE: ERROR

CAUSE: User entered a defense ID that matches an ID already in the database.

**PROGRAM ACTION:** Ignore the input.

**USER ACTION REQUIRED:** Enter the data again with a new defense ID.

MODIFY04 - MODIFICATION COMPLETED -- <INTG> NEW THREATS  
 <INTG> DELETED THREATS  
 <INTG> MOVED THREATS

MESSAGE TYPE: INFORMATION

**CAUSE:** Exiting the Modify function.

PROGRAM ACTION: Exit to Main Menu.

USER ACTION REQUIRED: None.

MONSEQ01 - M-ON-N HAS CONSIDERED <INTG> ALLOCATION POSSIBILITIES

MESSAGE TYPE: INFORMATION

CAUSE: Trying allocation possibilities in the M-on-N algorithm.

PROGRAM ACTION: Try next thousand alternatives (unless done then quit).

USER ACTION REQUIRED: None.

MSGWRT01 - NUMBER OF LINES FOR MSGWRT INCORRECTLY SPECIFIED  
ERROR MESSAGE ID IS: <CHAR>

MESSAGE TYPE: WARNING

CAUSE: Format statement on message is inconsistent.

PROGRAM ACTION: Continues processing.

USER ACTION REQUIRED: Contact an SCT Engineer.

MSGWRT02 - ERROR WRITING OUT MESSAGE: <CHAR>

MESSAGE TYPE: WARNING

CAUSE: An error was found on writing out a message.

PROGRAM ACTION: Continues processing.

USER ACTION REQUIRED: Contact an SCT Engineer.

NAMEID01 - UNRECOGNIZABLE TABLE

MESSAGE TYPE: ERROR

CAUSE: Subroutine TBRGZ failed to recognize table name.

PROGRAM ACTION: Exit subroutine NAMEID.

USER ACTION REQUIRED: Verify name and access to named table.

NAMEID02 - NO RECORDS FOUND

MESSAGE TYPE: ERROR

CAUSE: A record in the THRT table was not found.

PROGRAM ACTION: Exit subroutine NAMEID.

USER ACTION REQUIRED: Verify number of records.

NAMEID03 - ERROR PROCESSING DATA BASE MANAGER  
ERROR ON FILE <CHAR>

MESSAGE TYPE: ERROR

CAUSE: PROBLEM READING IN ARRAY TREE

PROGRAM ACTION: GET OUT OF SUBROUTINE WITHOUT DISPLAYING

USER ACTION REQUIRED: CHECK ARRAY TREE

NAMEID04 - MORE THAN MXID IDS TO DISPLAY

MESSAGE TYPE: ERROR

CAUSE: Parameter MXID is improperly dimensioned.

PROGRAM ACTION: Stop displaying remaining IDs.

USER ACTION REQUIRED: This should never happen. Report to SCT.

NITELN01 - UNABLE TO PROCESS NIGHT FEATURE  
NIGHT FLIGHTS WILL NOT BE CHECKED FOR  
PLEASE CHECK FILE <CHAR>

MESSAGE TYPE: WARNING

CAUSE: Error return from call to data base routines on table FEAT.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should check table FEAT.

NITELN02 - UNABLE TO PROCESS NIGHT FEATURE  
NIGHT FLIGHTS WILL NOT BE CHECKED FOR  
PLEASE CHECK IRIS AND ISET IN CURR

MESSAGE TYPE: WARNING

CAUSE: Times for sunrise and sunset in table CURR are transposed.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should check data in table CURR.

NODES-01 - \*\*\*\*\*

NODES EXECUTING

MESSAGE TYPE: INFORMATION

CAUSE: Start of subroutine NODES.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

NODES-03 - ERROR PROCESSING NODES

MESSAGE TYPE: ERROR

CAUSE: (1) Subroutines ARDEF or ARCLER failed with arrays NLIS or TREE or  
(2) Subroutine TBREAD failed with CURR file (less likely).

PROGRAM ACTION: Return an invalid completion code to the calling  
subroutine and exit NODES.

USER ACTION REQUIRED: Contact an SCT Engineer.

NODES-04 - INVALID VALUE FOR NBLK = <INTG> - CHECK CURR PLEASE  
NODES NOT PROCESSED

MESSAGE TYPE: ERROR

CAUSE: NBLK is less than 1.

PROGRAM ACTION: Return an invalid completion code to the calling  
subroutine and exit NODES.

USER ACTION REQUIRED: Contact an SCT Engineer.

NODES-05 - ERROR IN TIME BLOCKS - BLOCKS INCONSISTENT  
CHECK CURR PLEASE NODES NOT PROCESSED

MESSAGE TYPE: ERROR

CAUSE: Time blocks must be monotonically decreasing and less than ITENCU.

PROGRAM ACTION: Return an invalid completion code to the calling  
subroutine and exit NODES.

USER ACTION REQUIRED: Contact an SCT Engineer.

NODES-06 - PROCESSING BASE NODES

MESSAGE TYPE: INFORMATION

CAUSE: About to process base nodes.

PROGRAM ACTION: Attempt to process base nodes.

USER ACTION REQUIRED: None.

NODES-07 - PROCESSING TARGET NODES

MESSAGE TYPE: INFORMATION

CAUSE: About to process target nodes.

PROGRAM ACTION: Attempt to process target nodes.

USER ACTION REQUIRED: None.

NODES-09 - PROCESSING LOW LEVEL TRANSIT ROUTE NODES

MESSAGE TYPE: INFORMATION

CAUSE: About to process low level transit route nodes.

PROGRAM ACTION: Attempt to process low level transit route nodes.

USER ACTION REQUIRED: None.

NODES-10 - PROCESSING TRANSIT CORRIDOR NODES

MESSAGE TYPE: INFORMATION

CAUSE: About to process the transit corridor nodes.

PROGRAM ACTION: Attempt to process the transit corridor nodes.

USER ACTION REQUIRED: None.

NXTTRT01 - NO MORE SECTIONS CAN BE CONNECTED TO THIS REPORT  
REPORT FINISHED

MESSAGE TYPE: INFORMATION

CAUSE: This message is issued when no more sections can be add to this report.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

OBSVBL01 - NUMBER OF POINTS CALCULATED FOR THIS THREAT  
GREATER THAN THE THREAT ARRAY SIZE  
MXFIXD, NPTS = <INTG>, <INTG>

MESSAGE TYPE: ERROR

CAUSE: This message is written when the number of points needed  
to mask a threat is greater than the dimensions of array IFIXDT.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: Possible user options are, delete the threat,  
change the threat range, or increase the dimensions of IFIXDT.

OOPROC01 - SUCCESSFULLY CREATED OO FILE: <CHAR>  
<INTG> AI LINES  
<INTG> OCA LINES  
<INTG> RESOURCE LINES

MESSAGE TYPE: INFORMATION

CAUSE: User has completed the creation of an OO file.

PROGRAM ACTION: None.

USER ACTION REQUIRED: None.

PAN---01 - JUMP WITHIN SCALE FAILED

MESSAGE TYPE: INFORMATION

CAUSE: User tried to JUMP TO a location that is not on this map.

PROGRAM ACTION: None.

USER ACTION REQUIRED: Try a new scale or a new place to JUMP TO.

PARSE-01 - <INTG> CHARACTERS SUPPLIED FOR DESCRIPTION  
ONLY THE 1ST 24 ARE ACCEPTED

MESSAGE TYPE: WARNING

CAUSE: The user has entered a description of more than 24 characters.

PROGRAM ACTION: The description is set to the first 24 characters:  
program execution continues normally.

USER ACTION REQUIRED: None is required. The user may choose to issue  
a Database Change command to correct the description.

PENALT01 - BAD ALTITUDE LEVEL, VALUE MUST BE BETWEEN 1 AND <INTG>

MESSAGE TYPE: ERROR

CAUSE: Invalid altitude level selected.

PROGRAM ACTION: Exit subroutine PENALT.

USER ACTION REQUIRED: Enter valid altitude level.

PENALT02 - \*\*\*\*\*

PENALT EXECUTING

MESSAGE TYPE: INFORMATION

CAUSE: Start Execution of the subroutine PENALT.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

PLAN--07 - UNABLE TO READ FILE <CHAR>

MESSAGE TYPE: ERROR

CAUSE: Failure in ARGET or TBREAD.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit PLAN.

USER ACTION REQUIRED: Check data base. If all data appears to be consistent, contact an SCT Engineer.

PLAN--09 - UNABLE TO WRITE FILE <CHAR>

MESSAGE TYPE: ERROR

CAUSE: TBWRIT or ARWRIT failed.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit PLAN.

USER ACTION REQUIRED: Contact an SCT Engineer.

PLAN--20 - \*\* NOTICE \*\*

YOU HAVE EXECUTED MANUAL ON THIS PLAN.  
EVALUATE WILL CAUSE YOUR MANUAL MISSIONS TO BE OVERWRITTEN.  
\*\* THIS PLAN HAS BEEN AUTOMATICALLY SAVED \*\*

MESSAGE TYPE: INFORMATION

CAUSE: The user has executed MANUAL and then EVALUATE from the PLAN OPTIONS menu for the same PLAN record.

PROGRAM ACTION: Do not execute EVALUATE. Return to the PLAN OPTIONS menu.

USER ACTION REQUIRED: Execute EVALUATE.

PLAN--22 - MANUAL WILL NOT BE EXECUTED BECAUSE THIS IS AN ACCEPTED PLAN.  
PLEASE EITHER UNACCEPT THIS PLAN, OR CREATE A NEW PLAN.

MESSAGE TYPE: WARNING

CAUSE: Cannot modify an accepted route.

PROGRAM ACTION: Exit manual.

USER ACTION REQUIRED: Unaccept plan or build a new plan.

PLCHAN01 - MINIMUM TIME IS GREATER THAN MAXIMUM TIME

MESSAGE TYPE: ERROR

CAUSE: Minimum time for time window is greater than maximum time for time window.

PROGRAM ACTION: The user is prompted for both minimum and maximum times again.

USER ACTION REQUIRED: Enter minimum and maximum times again.

PLCHAN02 - MINIMUM TIME ENTERED IS NOT CONSISTENT WITH ANY  
TIME BLOCK

MESSAGE TYPE: ERROR

CAUSE: The minimum time entered is not a valid time.

PROGRAM ACTION: Program prompts user for minimum time again.

USER ACTION REQUIRED: Enter minimum time again.



PLCHAN03 - MAXIMUM TIME ENTERED IS NOT CONSISTENT WITH ANY  
TIME BLOCK

MESSAGE TYPE: ERROR

CAUSE: Maximum time entered is not valid.

PROGRAM ACTION: Program prompts user for maximum time again.

USER ACTION REQUIRED: Enter maximum time.

PLCONE01 - INVALID ANGLEC = <REAL> FOR ECAC <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The table ECAC has an invalid value for the angle of the cone of influence of the EC aircraft.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should check the data in the table ECAC.

PLCONE02 - INVALID RANGE C = <REAL> FOR ECAC <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The table ECAC has a negative range value for the distance from the EC aircraft to the threat.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should check data in table ECAC.

PLCONE03 - INVALID NPTS = <INTG> MUST BE AT LEAST 4

MESSAGE TYPE: ERROR

CAUSE: Minimum number of point to draw an EC cone is four. Current number is less than for.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: This value is currently set to 20 in the code. The only way to change it would be to change the code.

PLCONE04 - INVALID NEC = <INTG>

MESSAGE TYPE: ERROR

CAUSE: The calling argument has an invalid number for the EC plan.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should check the arguments in the calling routine.

PLCONE05 - EC ROZ <CHAR> HAS BAD NPTS = <INTG>

MESSAGE TYPE: ERROR

CAUSE: Bad number of points in roz box.

PROGRAM ACTION: Halts processing.

USER ACTION REQUIRED: Fix the specified EC ROZ box in the FEAT table.

PLNTOG01 - UNABLE TO ACCEPT THIS PLAN. AT LEAST ONE DMPI IN THIS  
PLAN IS PART OF ANOTHER ACCEPTED PLAN. THE FIRST ACCEPTED DMPI  
IS <CHAR> PLEASE REALLOCATE THIS PLAN AND THEN TRY AGAIN TO  
ACCEPT IT.

MESSAGE TYPE: ERROR

CAUSE: Dmpi's in the current plan are part of an accepted plan.

PROGRAM ACTION: Halts processing.

USER ACTION REQUIRED: Reallocate the plan so only unaccepted dmpi's  
are part of it.

PLNTOG02 - UNABLE TO WRITE FILE

MESSAGE TYPE: ERROR

CAUSE: Program is unable to write to a file.

PROGRAM ACTION: Halts processing.

USER ACTION REQUIRED: Contact an SCT Engineer.

PLOCE-01 - INCORRECT FORMAT IN LOCE FILE FOR <CHAR> IN RECORD  
WITH ID = <CHAR>

MESSAGE TYPE: WARNING

CAUSE: Incorrect format in input LOCE file.

PROGRAM ACTION: Continue processing the next record.

USER ACTION REQUIRED: Examine LOCE file for incorrectly formatted records. Correct incorrect formats and reprocess.

PLROUT01 - PROCESSING ROUTE DATA INTO THE PLAN TABLE

MESSAGE TYPE: INFORMATION

CAUSE: Processing the routing data into the plan table.

PROGRAM ACTION: Continue processing.

USER ACTION REQUIRED: None.

PLROUT04 - UNABLE TO READ FILE <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The program is unable to read from a specified input file.

PROGRAM ACTION: Halts processing.

USER ACTION REQUIRED: Filename maybe incorrect, or file may not exist. Try again, if problem continues contact an SCT Engineer.

PLROUT12 - MISSION <CHAR>: <CHAR> TO <CHAR> AT <CHAR>  
WILL ENCOUNTER WEATHER OR AN AVOIDANCE AREA.

MESSAGE TYPE: WARNING

CAUSE: Checking the indicated mission against the weather and avoidance areas. The mission will encounter at least one of these areas.

PROGRAM ACTION: None. Continue processing.

USER ACTION REQUIRED: None. However note that a problem exists with this mission.

PLROUT13 - MISSION <CHAR>: <CHAR> TO <CHAR> AT <CHAR>  
COMBAT FUEL RESERVE VIOLATION.

MESSAGE TYPE: WARNING

CAUSE: This mission violates the aircrafts combat fuel reserves,  
as currently planned.

PROGRAM ACTION: None. Continue processing.

USER ACTION REQUIRED: None. However note that this mission has a  
fuel problem.

PLROUT14 - MISSION <CHAR>: <CHAR> TO <CHAR> AT <CHAR>  
AIRCRAFT FUEL CONSTRAINT VIOLATION.

MESSAGE TYPE: WARNING

CAUSE: This mission violates the fuel constraints, as currently planned.

PROGRAM ACTION: None. Continue processing.

USER ACTION REQUIRED: None. However note that this mission has a  
serious fuel problem.

PLROUT15 - MISSION <CHAR>: <CHAR> TO <CHAR> AT <CHAR>  
NO CANDIDATE MISSIONS ARE AVAILABLE  
NO ROUTING SOLUTION FOUND.

MESSAGE TYPE: WARNING

CAUSE: Cannot find any candidate missions for this tasking. Unable  
to process the routing data for this mission.

PROGRAM ACTION: None. Continue processing.

USER ACTION REQUIRED: Please review this tasking. Check the  
weaponeering solutions in the DMPI table for reasonableness.

PRANOD01 - NO ACCESSIBLE NODES. RETURNING TO MAIN MENU

MESSAGE TYPE: ERROR

CAUSE:

PROGRAM ACTION: Returns to the Main Menu.

USER ACTION REQUIRED: Contact an SCT Engineer.

PRANOD03 - NO RECORDS SELECTED --  
IF YOU WISH TO EXIT MENU USE S7 OR S8  
S7 ---> MAIN MENU  
S8 ---> BACKUP ONE MENU

MESSAGE TYPE: ERROR

CAUSE: User tried to exit menu using DONE.

PROGRAM ACTION: Re-issue menu.

USER ACTION REQUIRED: Use S7 or S8 to exit this menu.

PRDANG01 - NO LEVELS INPUT FOR ALT CONTOURS

MESSAGE TYPE: ERROR

CAUSE: No levels were selected for display of danger contours.

PROGRAM ACTION: Program continues processing and allows user to select a set of danger contour levels.

USER ACTION REQUIRED: Select a set of danger contour levels.

PRDANG02 - INAPPROPRIATE RESPONSE - TRY AGAIN

MESSAGE TYPE: ERROR

CAUSE: User typed in an inappropriate response to the menu.

PROGRAM ACTION: Program allows user to try again.

USER ACTION REQUIRED: Get it correct this time.

PRDANG04 - LEVEL CHOSEN OUTSIDE OF BOUNDS-VALUE IGNORED

MESSAGE TYPE: WARNING

CAUSE: Danger level selected is outside of allowed bounds of the program.

PROGRAM ACTION: Continues processing and ignores invalid values.

USER ACTION REQUIRED: No user action required.

PREPLN01 - UNABLE TO READ FILE

MESSAGE TYPE: ERROR

CAUSE: The program is unable to read a file.

PROGRAM ACTION: Halts processing.

USER ACTION REQUIRED: Contact an SCT Engineer.

PREPRO01 - THIS RECORD NOT PROCESSED <CHAR> <CHAR> <CHAR>

MESSAGE TYPE: WARNING

CAUSE: Format error or fields in wrong position for this record.

PROGRAM ACTION: This record will not be processed.

USER ACTION REQUIRED: User should correct the record format in the LOCE file and reprocess the file.

PREPRO02 - IO ERROR IN READING LOCE FILE

MESSAGE TYPE: ERROR

CAUSE: Error return from system file read command.

PROGRAM ACTION: IRET set to -1, and program does an error return.

USER ACTION REQUIRED: Fix the LOCE file.

PREPRO03 - THREAT MODEL <CHAR> FOR ELINT REPORT <CHAR> NOT FOUND  
IN CORRELATION ARRAYS. THIS THREAT NOT PROCESSED

MESSAGE TYPE: WARNING

CAUSE: Threat model for this elint report not found.

PROGRAM ACTION: Supr will not process this elint report.

USER ACTION REQUIRED: Correct elint report in loce file or correct the threat model.

PREPRO04 - PREPROCESSING COMPLETED -- <INTG> NEW THREATS  
<INTG> REDUNDANT REPORTS  
<INTG> MAJOR CHANGES  
<INTG> MINOR CHANGES

MESSAGE TYPE: INFORMATION

CAUSE: LOCE Preprocessor has been successfully completed.

PROGRAM ACTION: Control returns to the SUPR Main menu.

USER ACTION REQUIRED: None

PREPRO05 - TOO MANY THREATS: NUMBER = <INTG> MAX = <INTG>

MESSAGE TYPE: ERROR

CAUSE: The number of threats exceeds the maximum allowed during the execution of the LOCE Pre-processor.

PROGRAM ACTION: LOCE Pre-processing is terminated. Program execution continues at the SUPR Main menu.

USER ACTION REQUIRED: Issue the Update command to eliminate any correlated threats, and/or the Purge command to eliminate any obsolete threats. Then repeat the LOCE command to complete Pre-processing the LOCE file.

PRESTC01 - BAD THREAT UNCERTAINTY REGION--SMAJOR=<REAL>  
SMINOR=<REAL>

MESSAGE TYPE: ERROR

CAUSE: A threat has been defined whose semi-minor axis is less than or equal to zero, or whose semi-major axis is less than or equal to the semi-minor axis.

PROGRAM ACTION: The threat is not added to the statespace.

USER ACTION REQUIRED: Use the Database Change command to correct the threat. Then update the statespace.

PREHT01 - MASKING IS INOPERABLE, IMSKAP SHOULD BE > -1

MESSAGE TYPE: ERROR

CAUSE: Masking switch is turned off.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should check table ALGP for appropriate values.

PRINT-01 - NO MISSIONS FOR TARGET <CHAR>

MESSAGE TYPE: ERROR

CAUSE: This target has no missions currently available.

PROGRAM ACTION: Allows user to try again.

USER ACTION REQUIRED: No corrective action required. User may run plan to create missions.

PRLTRO2 - LLTR POINT <CHAR> FROM LLTR <CHAR> NOT FOUND IN MIKE TABLE. CONTINUING PROCESSING WITH NEXT POINT.

MESSAGE TYPE: WARNING

CAUSE: The program could not find the specified point in the TNOD table.

PROGRAM ACTION: The program issues a warning message, ignores the unfound point, and continues processing with the next point.

USER ACTION REQUIRED: The user has the option of editing the input file to contain a known point, adding the point to the table directly, or allowing the preprocessor to skip the missing point by connecting the next point in the list in the unfound point's place. (Ignore the problem and live without the point.) This decision is at the user's discretion. It is also possible to input geographical coordinates and allow the preprocessor to select the closest point in its database.

PRLTRO3 - MORE THAN <INTG> POINTS IN LLTR. LLTR <CHAR> IS INCOMPLETE AND WILL PROBABLY NOT CROSS THE IFF-ON LINE

MESSAGE TYPE: WARNING

CAUSE: LLTR contains more points than program allows.

PROGRAM ACTION: Truncate the last points in LLTR; continue processing.

USER ACTION REQUIRED: None.

PROC--01 - UNABLE TO RECOGNIZE ARRAY <CHAR>

MESSAGE TYPE: WARNING

CAUSE: Could not recognize statespace array.

PROGRAM ACTION: Warn user and continue processing.

USER ACTION REQUIRED: Verify that there are as many SAS and MAS files as specified in NAC in the ALGP table.



PROC--02 - <CHAR> MODIFIED AFTER <CHAR>  
STRONGLY SUGGEST YOU RESELECT PENETRATION ALTITUDE

MESSAGE TYPE: WARNING

CAUSE: Multi altitude statespace has been modified since single altitude statespace was filled.

PROGRAM ACTION: Warn user and continue.

USER ACTION REQUIRED: Reselect penetration altitude.

PRVTYP01 - # AIRCRAFT TYPES = <INTG>. IT MUST BE BETWEEN 1 & <INTG>

MESSAGE TYPE: ERROR

CAUSE: Invalid aircraft type.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit PRVTYP.

USER ACTION REQUIRED: Contact an SCT Engineer.

PSANGLO1 - WRONG SPECIFICATION FOR <CHAR> = <CHAR>

MESSAGE TYPE: WARNING

CAUSE: The user entered a Geographic Co-ordinate using an incorrect format.

PROGRAM ACTION: The Co-ordinate is not accepted; program execution continues normally.

USER ACTION REQUIRED: Enter the Co-ordinate correctly.

PSANGLO2 - WRONG SPECIFICATION FOR <CHAR>  
DEG = <INTG>; MIN = <INTG>; SEC = <REAL>

MESSAGE TYPE: WARNING

CAUSE: The user entered a Geographic Co-ordinate with degrees >=90 for Latitude, or degrees >=180 for Longitude, or minutes >=60, or seconds >=60.

PROGRAM ACTION: The Co-ordinate is not accepted; program execution continues normally.

USER ACTION REQUIRED: Enter the Co-ordinate correctly.

PSDATE01 - BAD FORMAT FOR DATE--MUST BE dd-mmm-yy.  
Examples: 6-DEC-86 or 06-MAR-87 or 29-JUN-1987  
ACTUAL INPUT WAS <CHAR>

MESSAGE TYPE: WARNING

CAUSE: Error return on trying to read user input date.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should input date in correct format.

PSLTLN01 - ERROR ENTERING UTM -- ZONE AND CO-ORDINATE MUST BE ON  
SAME LINE

MESSAGE TYPE: WARNING

CAUSE: The user entered a UTM Zone without a UTM Co-ordinate.

PROGRAM ACTION: The Co-ordinate is not accepted; program execution  
continues normally.

USER ACTION REQUIRED: Enter the Co-ordinate correctly.

PSLTLN02 - ERROR ENTERING LATITUDE -- MUST BE  $\leq 90$  DEGREES

MESSAGE TYPE: WARNING

CAUSE: The user entered a decimal Latitude  $> 90$  degrees.

PROGRAM ACTION: The Co-ordinate is not accepted; program execution  
continues normally.

USER ACTION REQUIRED: Enter the Co-ordinate correctly.

PSLTLN03 - ERROR ENTERING LONGITUDE -- MUST BE  $\leq 180$  DEGREES

MESSAGE TYPE: WARNING

CAUSE: The user entered a decimal Longitude  $> 180$  degrees.

PROGRAM ACTION: The Co-ordinate is not accepted; program execution  
continues normally.

USER ACTION REQUIRED: Enter the Co-ordinate correctly.

PSLTLN04 - ERROR ENTERING LATITUDE / LONGITUDE

MESSAGE TYPE: WARNING

CAUSE: The user entered a position which was not a legal format for UTM, Geographic or decimal degrees.

PROGRAM ACTION: The Co-ordinate is not accepted; program execution continues normally.

USER ACTION REQUIRED: Enter the Co-ordinate correctly.

PSLTLN05 - ERROR ENTERING COORDINATES  
LATITUDE AND LONGITUDE MUST BE ON SAME LINE

MESSAGE TYPE: WARNING

CAUSE: The user entered a Latitude without a Longitude.

PROGRAM ACTION: The Co-ordinate is not accepted; program execution continues normally.

USER ACTION REQUIRED: Enter the Co-ordinate correctly.

PSLTLN06 - ERROR ENTERING UTM  
1ST CHARACTER DOESNT CORRESPOND TO ZONES 31U,32U OR 33U

MESSAGE TYPE: WARNING

CAUSE: The user entered a UTM Co-ordinate without a UTM Zone. The first digit of the UTM co-ordinate did not correspond to any of the default zones: 31U, 32U or 33U.

PROGRAM ACTION: The Co-ordinate is not accepted; program execution continues normally.

USER ACTION REQUIRED: Enter the Co-ordinate correctly.

PSRNGE01 - FORMAT MUST BE SMALLER INTEGER, FOLLOWED BY COLON  
FOLLOWED BY LARGER INTEGER, WITH NO SPACES--TRY AGAIN

MESSAGE TYPE: ERROR

CAUSE: Bad range specification.

PROGRAM ACTION: Try again.

USER ACTION REQUIRED: Try again.

PSRNGE02 - INCORRECT MENU SELECTION. TRY AGAIN!

MESSAGE TYPE: ERROR

CAUSE: User input an illegal response to the menu.

PROGRAM ACTION: Re-issue message.

USER ACTION REQUIRED: Select a legal menu option.

PSUTMC01 - WRONG SPECIFICATION FOR UTM COORD = <CHAR>

MESSAGE TYPE: WARNING

CAUSE: The user entered a UTM Co-ordinate which did not consist of two letters followed by 4, 6 or 8 digits.

PROGRAM ACTION: The Co-ordinate is not accepted; program execution continues normally.

USER ACTION REQUIRED: Enter the Co-ordinate correctly.

PSUTMZ01 - WRONG SPECIFICATION FOR UTM ZONE = <CHAR>

MESSAGE TYPE: WARNING

CAUSE: The user entered a UTM Zone which did not consist of a number between 1 and 60, followed immediately by a letter.

PROGRAM ACTION: The Co-ordinate is not accepted; program execution continues normally.

USER ACTION REQUIRED: Enter the Co-ordinate correctly.

PURGE-01 - ERROR RETURN ON ARREAD OF "TOBS" FILE

MESSAGE TYPE: ERROR

CAUSE: Program cannot read the Terrain Observability File.

PROGRAM ACTION: Halts processing.

USER ACTION REQUIRED: Contact the Database Administrator who should check the TOBS file on the system. If OK, contact an SCT Engineer.

PURGE-02 - <INTG> THREATS WERE SUCCESSFULLY PURGED

MESSAGE TYPE: INFORMATION

CAUSE: A success message is issued upon completion of purging.

PROGRAM ACTION: Program returns to SUPR Main menu.

USER ACTION REQUIRED: None

QTRALTO1 - VOID PART OF TERRAIN --  
I1A,I2A,J1A,J2A = <INTG> <INTG> <INTG> <INTG>

MESSAGE TYPE: ERROR

CAUSE: Program is trying to access part of the terrain file for an area which does not exist in the file.

PROGRAM ACTION: Halts processing.

USER ACTION REQUIRED: Contact the Database Administrator who should check if the correct terrain file is being accessed. If OK, contact an SCT Engineer.

QTRALTO2 - EMPTY TERRAIN FILE ? - CHECK IBYTAP

MESSAGE TYPE: ERROR

CAUSE: Program is trying to access the terrain file which is empty.

PROGRAM ACTION: Halts processing.

USER ACTION REQUIRED: Contact an SCT Engineer.

QTRALTO3 - ALTLIN DIMENSION EXCEEDED  
MXTMSK, NXAMT, NYAMT <INTG> <INTG> <INTG>

MESSAGE TYPE: ERROR

CAUSE:

PROGRAM ACTION:

USER ACTION REQUIRED: Contact an SCT Engineer.

RCRCGZ01 - TABLE <CHAR><CHAR><CHAR><CHAR><CHAR><CHAR><CHAR> NOT FOUND

MESSAGE TYPE: ERROR

CAUSE: Specified table records are less than one.

PROGRAM ACTION: Exit RCRCGZ with a completion code of zero.

USER ACTION REQUIRED: Try again.

RCRCGZ02 - TABLE <CHAR> HAS NO ROOM FOR A NEW RECORD

MESSAGE TYPE: WARNING

CAUSE: Maximum number of records has been reached.

PROGRAM ACTION: Exit RCRCGZ with a completion code of zero.

USER ACTION REQUIRED: Try again.

RDACO-01 - LOOKING FOR INPUT DATA KEYWORD.  
PROGRAM ENCOUNTERED EXTRANEIOUS INFORMATION PRIOR  
TO BEGINNING STANDARD INPUT.

MESSAGE TYPE: INFORMATION

CAUSE: Program encountered data which was not expected prior to the beginning of standard ACO formats.

PROGRAM ACTION: Program ignores all extraneous information, and begins processing at the first occurrence of the expected keyword.

USER ACTION REQUIRED: None. Program will ignore data prior to encountering the expected keyword.

RDAIRS03 - ERROR INTERPRETING AIRSTAR RECORDS. PROGRAM WILL NOT  
CONTINUE PROCESSING AIRSTAR FILE. FILE PROCESSING ABORTED  
AT RECORD: <CHAR>

MESSAGE TYPE: WARNING

CAUSE: Airstars file is in the wrong format.

PROGRAM ACTION: Halts processing.

USER ACTION REQUIRED: Correct format and reprocess.

RDDMPI01 - INCORRECT FORMAT FOR TARGETING DATA. IGNORING LINE:  
<CHAR>

MESSAGE TYPE: WARNING

CAUSE: The program detected an incorrect format while attempting to process DMPI information through the Operations Order preprocessing routines.

PROGRAM ACTION: The program issues a warning message and proceeds processing the next record.

USER ACTION REQUIRED: The user should review the input file DMPI format for correctness, and after correction, should reprocess the input file to recover the missing data.

RDDMPI02 - INPUT DMPI NOT IN WEAP TABLE. IGNORING LINE:  
<CHAR>

MESSAGE TYPE: WARNING

CAUSE: The input targeting data file specified a DMPI not in WEAP table. The program was therefore unable to retrieve necessary data and continue processing the DMPI.

PROGRAM ACTION: The program issues a warning message and continues processing with the next record.

USER ACTION REQUIRED: The user should review the DMPI input file to determine if the DMPI identifier was input incorrectly, and correct the file as necessary. If the file is correct, the user should determine the requirements for the DMPI and the availability of support data, and should use the database manager to update the WEAP table with data to support the DMPI. The file should then be reprocessed to recover the lost information.

RDDMPI03 - ERROR INTERPRETING DMPI NAME. NO CHARACTERS IN FIELD.  
LINE IGNORED: <CHAR>

MESSAGE TYPE: WARNING

CAUSE: The program was unable to find any characters in the DMPI field of the targeting information.

PROGRAM ACTION: The program issues an error message and continues processing with the next line of target information.

USER ACTION REQUIRED: The user should determine if the missed data is in the proper format, containing the dmpi information in the field specified in the user's manual. If the information is missing, the data should be filled in and the processor rerun to fill in the missing information.

RDDMPI04 - ERROR INTERPRETING DMPI. TOO MANY CHARACTERS IN DMPI NAME.  
PROGRAM WILL TRUNCATE EXTRA CHARACTERS.

MESSAGE TYPE: WARNING

CAUSE: The program encountered a dmpi name longer than the maximum allowable characters.

PROGRAM ACTION: The program truncates the dmpi name to the acceptable number of characters and continues processing.

USER ACTION REQUIRED: No user action is required, however, Please note that if the program truncates the dmpi name, it is probable that the dmpi name did not match a record in the WEAP before truncation, and will most likely not match after truncation. If this is the case, an error message will result, and the appropriate action listed under that message should be taken.

RDDMPI05 - ERROR INTERPRETING TARGET NAME. NO CHARACTERS IN NAME.  
LINE IGNORED: <CHAR>

MESSAGE TYPE: WARNING

CAUSE: The program encountered a target with no data in the target field.

PROGRAM ACTION: The program will issue an error message and continue processing with the next line of target information.

USER ACTION REQUIRED: The user should determine if the data is in the correct input format as specified in the user's manual. If not, the data should be reformatted and the processor should be rerun. If the target name is simply missing, then a new target name should be inserted in the appropriate slot, and the processor should be rerun to recover the missing target.

RDDMPI06 - ERROR INTERPRETING TARGET NAME. TARGET NAME TOO LONG.  
TRUNCATING NAME TO ACCEPTABLE LENGTH.

MESSAGE TYPE: WARNING

CAUSE: The program encountered a target name which contained more characters than allowed by the preprocessor.

PROGRAM ACTION: The program will truncate the target name to an acceptable length.

USER ACTION REQUIRED: No user action is required.



RDDMPI07 - OBJECTIVE NONSPECIFIC. PROBABILITY OF DESTRUCTION FOR  
DMPI <CHAR> WILL BE SET TO 0.50.

MESSAGE TYPE: WARNING

CAUSE: The program could not interpret the probability of destruction indicated for the given dmpi.

PROGRAM ACTION: The program sets the probability of destruction for the specified dmpi to zero.

USER ACTION REQUIRED: The user can edit the processed command file to enter the desired probability of destruction directly, or if the desired probability of destruction has a representative value, the input file can be updated with the correct value in the correct format position, and the processor can be rerun to recover the missing data.

RDDMPI08 - NUMBER OF TARGETS EXCEEDS MAXIMUM, IGNORING LINE:  
<CHAR>

MESSAGE TYPE: WARNING

CAUSE: EIFEL Ops Order processing cannot create any more target records without exceeding the target record limit.

PROGRAM ACTION: Ignore the dmpi shown

USER ACTION REQUIRED: Review the TGT and DMPI tables, delete any targets or DMPIs that are not of interest any longer. If the warning message persists then you will have to make two planning runs with two different sets of targets.

RDDMPI09 - CANNOT RECOGNIZE WEAPONNEERING SOLUTION <CHAR>  
LINE IGNORED: <CHAR>

MESSAGE TYPE: WARNING

CAUSE: Dmpi lookup and generic weaponneering lookup have failed while processing the 00.

PROGRAM ACTION: Continue processing with the next record.

USER ACTION REQUIRED: None required. however, if dmpi is to be input into database, objective must be changed to match an item in the WEAP table.

RDDMPI10 - USING BEST FIT WEAPONERING SOLUTION <CHAR>  
FOR OBJECTIVE <CHAR> DMPI <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: The program was unable to find either the dmpi id or objective code in the WEAP table.

PROGRAM ACTION: The program locates the best fit alternative to the objective.

USER ACTION REQUIRED: No user action is required.

RDIFF-01 - DATA NOT UNDERSTOOD READING IFF-ON LINE. POINT IGNORED:  
<CHAR> IN LINE: <CHAR>

MESSAGE TYPE: WARNING

CAUSE: The program encountered non-geographic coordinate data while attempting to read in points in the IFF-ON line.

PROGRAM ACTION: The program issues an error message and continues processing with the next line of data.

USER ACTION REQUIRED: The user should check the ACO input file for correct format of geographic coordinate data if the output message contains coordinates which are part of the IFF-ON line.

RDIFF-02 - TOO MANY POINTS IN IFF-ON LINE. MAX NUMBER OF POINTS  
ALLOWED IS: <INTG>. POINT <CHAR> WILL BE IGNORED.

MESSAGE TYPE: WARNING

CAUSE: The program encountered too many geographic coordinates while reading in the IFF-ON line.

PROGRAM ACTION: The program ignores the point and continues processing.

USER ACTION REQUIRED: The program has essentially truncated the IFF-ON line. If this is not acceptable the user should go back into the ACO input file and selectively reduce the number of points in the IFF-ON line to the allowed number. The file would then have to be reprocessed to recover the rearranged information.

RDIFF-03 - TOO FEW POINTS IN IFF-ON LINE. NO FEBA LINE CREATED.

MESSAGE TYPE: WARNING

CAUSE: The program encountered no legible IFF-ON points in the IFF-ON section.

PROGRAM ACTION: The program issues a message informing the user that there were insufficient points in the IFF-ON line, and continues processing with the next section.

USER ACTION REQUIRED: The user should check the geographic coordinate formats of the points in the IFF-ON section of the ACO input file. If in error they should be corrected and the file reprocessed to recover the information.

RDLINE01 - END OF FILE REACHED. PROCESSING TERMINATED.

MESSAGE TYPE: INFORMATION

CAUSE: Program reached the end of file of the file being processed by the Eifel Preprocessing routines.

PROGRAM ACTION: Program displays informational messages, backs out of lower routines, closes input and output files, and redisplay the Eifel Preprocessor menu.

USER ACTION REQUIRED: None.

RDLINE02 - READ ERROR PROCESSING INPUT FILE, ABORTING PROCESS

MESSAGE TYPE: WARNING

CAUSE: Fortran READ error during Eifel Preprocessing

PROGRAM ACTION: Program displays error message, aborts processing, closes file, and redisplay Eifel Preprocessor menu.

USER ACTION REQUIRED: File cannot be read until input file fault has been corrected. Possible problems are:

1. File does not exist in current directory
2. User does not have read access to file
3. File contains lines with too few or too many characters.

The user should check the input file, and attempt to reprocess the file. If the error persists the user should contact an SCT Engineer.

RDLLTRO5 - LLTR MISSING INTEGER IDENTIFIER.  
POINT IS: <CHAR>

MESSAGE TYPE: WARNING

CAUSE: The program encountered a data point without a corresponding lltr identifier.

PROGRAM ACTION: The program issues a warning message, and continues processing, looking for the missing identifier. It will continue ignoring all points encountered until an identifier is located.

USER ACTION REQUIRED: The user should check the input data file and add an identifying integer label to the incorrect lltr point series. The processor should then be rerun to recover the missing information.

RDLLTRO6 - GEOGRAPHIC COORDINATE <CHAR> TRANSLATED  
TO POINT <CHAR> DISTANCE BETWEEN POINTS IS <REAL> NM.

MESSAGE TYPE: INFORMATION

CAUSE: The program encountered a geographic coordinate in place of a MIKE name as an LLTR point.

PROGRAM ACTION: The program looks up the closest point in the MIKE table and assigns the point name to that closest point. It then outputs a message which explains the correlation made and gives the distance between the coordinates and the point.

USER ACTION REQUIRED: No user action is required.

RDLLTRO7 - CANNOT OUTPUT LLTR WITHOUT NAME OR SUFFICIENT  
NUMBER OF POINTS. LLTR IS: <CHAR> NO OF POINTS IS: <INTG>

MESSAGE TYPE: WARNING

CAUSE: Program is unable to interrupt LLTR.

PROGRAM ACTION: Continue processing next LLTR.

USER ACTION REQUIRED: None is required, but to input LLTR into database, the user should edit the input file, and add a name to the LLTR, ensuring that the LLTR is in the specified format, and reprocess the file.

RDLOGS01 - ERROR PROCESSING WEAPON TYPE <CHAR> FOR BASE <CHAR>.  
MORE WEAPON TYPES REPORTED AT BASE THAN PERMITTED.  
LINE IGNORED: <CHAR>

MESSAGE TYPE: WARNING

CAUSE: The program tried to read in more weapon types for a single base than the program permits.

PROGRAM ACTION: The program issues a warning message that it is ignoring the surplus data, and continues processing the next line of the HOLDINGS/LOGSTAR file.

USER ACTION REQUIRED: The user should determine if the ignored data is essential to the correct solution to the mission planning problem. If so, the various weapon types should be prioritized and rearranged in the input file so that the essential data is presented before the weapon types of lesser importance.

RDLOGS02 - ERROR PROCESSING BASE <CHAR> TOO MANY BASES FOR THE  
PROGRAM TO HANDLE. THIS BASE WILL BE IGNORED.

MESSAGE TYPE: WARNING

CAUSE: The program attempted to read in more bases than it allows.

PROGRAM ACTION: The program issues a warning message, and continues to process the next HOLDINGS/LOGSTAR record. It will ignore the information provided for the specified base.

USER ACTION REQUIRED: The user should determine if the ignored base is essential to the mission planning task. If so, the bases should be prioritized and reordered in the HOLDINGS/LOGSTAR input file, and the file should be reprocessed to recover the lost information.

RDLOGS03 - ERROR INTERPRETING HOLDINGS RECORDS. PROGRAM WILL NOT  
CONTINUE PROCESSING HOLDINGS FILE. FILE PROCESSING ABORTED  
AT RECORD <CHAR>

MESSAGE TYPE: WARNING

CAUSE: The program encountered an error interpreting the HOLDINGS data items.

PROGRAM ACTION: The program issues an error message and quits processing the HOLDINGS input file.

USER ACTION REQUIRED: The program expects a fixed format input file. If this error occurs it is most likely that the format of the HOLDINGS input file has been changed. The user should contact an SCT Engineer.

RDLOGS04 - BASE <CHAR> DOES NOT EXIST IN THE BASE TABLE.  
BASE WILL BE IGNORED. CONTINUING PROCESSING WITH NEXT RECORD.

MESSAGE TYPE: WARNING

CAUSE: The program was unable to locate the specified base in the BASE table.

PROGRAM ACTION: The program will issue a warning message, ignore the missing base, and continue processing the next input data record.

USER ACTION REQUIRED: If the base information is needed for the mission planning task, the user should use the database manager to create a base of the same name as the rejected base in the BASE table. The HOLDINGS/LOGSTAR file should then be reprocessed to recover the missing data.

RDLOGS05 - WRITING LOGSTAR OUTPUT FILE

MESSAGE TYPE: INFORMATION

CAUSE: The program has completed processing the LOGSTAR input file and is writing the output file.

PROGRAM ACTION: The program writes the LOGSTAR output file.

USER ACTION REQUIRED: None.

RDLOGS06 - WEAPON TYPE NOT MATCHED ON BASE <CHAR>, WEAPON TYPE <CHAR>  
RECORD IGNORED.

MESSAGE TYPE: WARNING

CAUSE: The program was unable to match the weapon type code given in the HOLDINGS record with a approved CWG weapon type name.

PROGRAM ACTION: The program issues a warning message and continues processing the next record, ignoring the data with the unrecognized weapon code.

USER ACTION REQUIRED: The user should examine the HOLDINGS input file for correctness of weapon type codes. Any errors should be corrected and the file should be reprocessed to recover the lost data.

RDROZ-01 - ERROR CONVERTING COORDINATES TO CIJ AND WW BOX POINTS

MESSAGE TYPE: WARNING

CAUSE: Program generated an error while converting input coordinates to CIJ and WW corner points.

PROGRAM ACTION: Program issues warning message and continues processing the next line of information from the ACO.

USER ACTION REQUIRED: User should carefully check the input file format and data. If, after correction, the error persists the user should contact an SCT Engineer.

RDROZ-02 - ERROR READING IN LAT/LON,UTM FOR ROZ BOX <CHAR>.  
IGNORING ALL INFORMATION PERTAINING TO THIS ROZ BOX.  
PROCEEDING TO NEXT ROZ BOX.

MESSAGE TYPE: WARNING

CAUSE: The program encountered difficulty interpreting the expected latitude/longitude, UTM coordinates for the specified EC ROZ box.

PROGRAM ACTION: The program will issue a warning, ignore the rest of the data associated with the faulty EC ROZ box, and continue processing with the next ROZ box.

USER ACTION REQUIRED: The user should review the ACO input file and check for errors in coordinate formats, or extra characters/words in the ROZ box input format. Particularly, the user should ensure that the ROZ box type indicator is present in the input line. After corrections have been made, the file should be reprocessed to allow recovery of the previously incorrect ROZ box and related information.

RDROZ-03 - ERROR PROCESSING FLIGHT LEVEL FOR ROZ BOX <CHAR>.  
FLIGHT LEVEL IGNORED. CONTINUING PROCESSING.

MESSAGE TYPE: WARNING

CAUSE: The program encountered an error processing the flight level of the specified EC ROZ box.

PROGRAM ACTION: The program continues processing information on the next line of the ACO input file, ignoring the flight level for the specified EC ROZ box.

USER ACTION REQUIRED: The user should examine the ACO input file for errors in format and information. Particular attention should be paid to the flight level input line. The user should check to ensure that a space has been left between the flight level altitudes. The file should then be reprocessed to recover the previously incorrect data.

RDROZ-04 - ERROR PROCESSING TIME WINDOW FOR EC ROZ BOX <CHAR>.  
IGNORING TIME WINDOW, CONTINUING PROCESSING.

MESSAGE TYPE: WARNING

CAUSE: The program encountered an error interpreting the time window for the specified EC ROZ boxes.

PROGRAM ACTION: The program issues a message, and continues processing the next ROZ box or additional information on the same ROZ box starting with the next line of the ACO input file. The time window information is ignored.

USER ACTION REQUIRED: The user should review the ACO input file and correct any errors in the input time format. The input time should correspond to the format given in the users manual. The file should then be reprocessed to recover the previously incorrect data.

RDROZ-05 - EC ROZ IDENTIFIER FOR WW AND CIJ BOX IN WRONG FORMAT.  
FIRST TWO DIGITS MUST BE NUMERIC. LINE IGNORED: <CHAR>

MESSAGE TYPE: WARNING

CAUSE: The program expected an EC ROZ box identifier for a WW/CIJ ROZ box combination and recieved data which did not fit the required format.

PROGRAM ACTION: The program skips the line of information from the input file, and continues processing after issuing an error message.

USER ACTION REQUIRED: The user should review the input file format to ensure that all EC ROZ box identifiers are in the format outlined in the users manual. After corrections have been made the file should be reprocessed to recover the previously incorrect information.

RDROZ-06 - ERROR READING GEOGRAPHIC COORDINATES OF SOJ BOX  
LINE IGNORED: <CHAR>

MESSAGE TYPE: WARNING

CAUSE: The program encountered difficulty interpreting the geographical coordinates of the input SOJ box.

PROGRAM ACTION: The program issues a warning message, and continues processing with the next line.

USER ACTION REQUIRED: The user should examine the SOJ box coordinates to ensure that they are in the format dictated by the Users manual. When corrections have been made, the file should be reprocessed to recover the previously incorrect information.



RDRSRC01 - INCORRECT INPUT FORMAT FOR RESOURCE DATA. LINE IGNORED:  
<CHAR>

MESSAGE TYPE: WARNING

CAUSE: The program encountered data which did not conform to the expected input format of the Operations Order resources section.

PROGRAM ACTION: The program issues a warning message then continues processing the next line of input data.

USER ACTION REQUIRED: the user should examine the input data line for format irregularities and make corrections as required. The input data file should then be reprocessed to recover the missing data.

RDRSRC02 - AIRCRAFT TYPE NOT IN ACFT TABLE. LINE IGNORED: <CHAR>

MESSAGE TYPE: WARNING

CAUSE: The program could not locate the aircraft type in the input data line in the ACFT table.

PROGRAM ACTION: The program will ignore the input data line, issuing a message and continuing processing with the next line.

USER ACTION REQUIRED: The user should examine the input data line to ensure that the aircraft type is correctly placed in the resource data format (as indicated in the users manual). If the data is properly formatted then the user should update the ACFT table with an aircraft type to match the Operations Order resource input data.

RDRSRC03 - BASE INDICATED NOT IN BASE TABLE. LINE IGNORED:  
<CHAR>

MESSAGE TYPE: WARNING

CAUSE: The program encountered a location item which it was not able to locate in the BASE table.

PROGRAM ACTION: The program issues a warning message and continues processing the next line of input data.

USER ACTION REQUIRED: The user should check the input data file (Operations Order) formats to ensure that the location data is in the proper data field as indicated by the users manual. If it is, the user should use the database manager to add a base into the BASE table that matches the data provided by the input data file line.

RDRSRC04 - ERROR READING NUMBER OF AIRCRAFT. LINE IGNORED:  
<CHAR>

MESSAGE TYPE: WARNING

CAUSE: The program could not correctly interpret the data in the number of aircraft field of the Operations Order resource data input line as a integer number.

PROGRAM ACTION: The program issues a warning message and continues processing with the next input data line.

USER ACTION REQUIRED: The user should examine the input data to ensure that the number of aircraft item is placed in the correct data field as indicated in the users manual. The number of aircraft must be an integer number of four or fewer digits. After correction, the file should be reprocessed to recover the missing information.

RDWFZ-02 - ERROR READING LAT/LON/UTM FOR WFZ <CHAR>.  
WFZ WILL BE IGNORED.

MESSAGE TYPE: WARNING

CAUSE: The program encountered difficulty interpreting lat/lon or UTM coordinates for the center point of the WFZ.

PROGRAM ACTION: The program issues a warning message and continues processing the next WFZ. The current WFZ will not be output to the command file.

USER ACTION REQUIRED: The user should examine the ACO input file checking that the lat/lon or UTM coordinates are in the format specified by the users manual. The user should also check the format of the WFZ input to ensure that the correct format has been followed. After all necessary corrections have been made the input file should be reprocessed.

RDWFZ-03 - ERROR READING RADIUS OF WFZ <CHAR>.  
WFZ WILL BE IGNORED. CONTINUING PROCESSING WITH NEXT WFZ.

MESSAGE TYPE: WARNING

CAUSE: The program encountered difficulty interpreting the radius of a circular WFZ.

PROGRAM ACTION: The program issues a warning message, ignores the current WFZ, and continues processing new WFZ's with the next line of the ACO input file.

USER ACTION REQUIRED: The user should check the ACO input file for format inconsistencies particularly related to the WFZ input. Possible problems may be the input of noncircular WFZ's, or the addition of extra characters into the WFZ format.

REFMNU01 - BAD SYNTAX--NAME = <CHAR>,  
TYPE = <CHAR>, INDX,I1,I2 = <INTG> <INTG> <INTG>

MESSAGE TYPE: ERROR

CAUSE: INDX is out of bounds.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit REFMNU.

USER ACTION REQUIRED: Contact an SCT Engineer.

REPVRT01 - TABLE <CHAR> COULD NOT BE FOUND  
ATTEMPT TO WRITE REPORT <CHAR> ABORTED

MESSAGE TYPE: ERROR

CAUSE: Error return from routine TBRGZ.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should check the indicated file.

REPVRT02 - ITEM <CHAR> IN TABLE <CHAR> COULD NOT BE FOUND,  
ATTEMPT TO WRITE REPORT <CHAR> ABORTED

MESSAGE TYPE: ERROR

CAUSE: Error return from routine IMRCGZ. Item in table could not be found.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should check indicated table.

REPWRTO3 - COULD NOT FIND REPORT <CHAR> IN RPRT TABLE

MESSAGE TYPE: ERROR

CAUSE: Error return from routine TBREAD. Could not find selected record.

PROGRAM ACTION: Terminates processing and returns to calling routine.

USER ACTION REQUIRED: User should check records in table RPRT.

REPWRTO4 - INAPPROPRIATE BOUNDS, LOWER BOUND IS HIGHER THAN UPPER BOUND

LOWER BOUND IS: <CHAR>

UPPER BOUND IS: <CHAR>

TRY AGAIN!

MESSAGE TYPE: ERROR

CAUSE: User has transposed lower and upper bounds of report.

PROGRAM ACTION: Continues processing and allows user to try again.

USER ACTION REQUIRED: Enter bounds correctly.

REPWRTO5 - INAPPROPRIATE BOUNDS, LOWER BOUND IS HIGHER THAN UPPER BOUND

TRY AGAIN!

MESSAGE TYPE: ERROR

CAUSE: User has transposed input of upper and lower bounds for report.

PROGRAM ACTION: Continues processing and lets user try again.

USER ACTION REQUIRED: User should input bounds correctly.

REPWRTO6 - NUMBER OF RECORDS IN REPORTS EXCEEDS MAXIMUM: <INTG>

REPORT WILL NOT BE SORTED.

MESSAGE TYPE: ERROR

CAUSE: The number of records in the first table of the report exceeds the maximum allowed for sorting the report.

PROGRAM ACTION: The report is processed, but without sorting.

USER ACTION REQUIRED: Either accept an unsorted report, or place more stringent test conditions so that fewer records will be selected, or contact an SCT Engineer to request that the maximum allowed be increased.

RESPRC01 - LAST LINE REMOVED FROM THIS SECTION,  
REINITIALIZING SECTION AND STARTING OVER

MESSAGE TYPE: INFORMATION

CAUSE: User removed the last line from the section he was working on.

PROGRAM ACTION: The section is reinitialized and the user is allowed to begin working on it again.

USER ACTION REQUIRED: None.

RESPRC02 - NO PREVIOUS LINE, CURRENTLY ON FIRST LINE

MESSAGE TYPE: INFORMATION

CAUSE: User attempted to go to a previous line when he was already on line one of the section.

PROGRAM ACTION: None.

USER ACTION REQUIRED: None.

ROAM--01 - INVALID ROAM DIRECTION

MESSAGE TYPE: INFORMATION

CAUSE: The user tried to roam in a direction not covered by that map.

PROGRAM ACTION: None.

USER ACTION REQUIRED: Choose another direction or EXIT.

ROAM--02 - ROAM FAILED

MESSAGE TYPE: INFORMATION

CAUSE: The user tried to roam in a direction not covered by that map.

PROGRAM ACTION: None.

USER ACTION REQUIRED: Pick another direction or EXIT and pick another map scale.

ROUTE-01 - BASE-<CHAR> DOP-<CHAR>  
TARGET-<CHAR> FUEL STATUS-<INTG>

MESSAGE TYPE: DEBUG

CAUSE: Trace Level greater than 5.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

ROUTE-02 - BASE-<CHAR> DOP-<CHAR>  
TARGET-<CHAR> FUEL STATUS-<INTG>

MESSAGE TYPE: DEBUG

CAUSE: Trace Level greater than 5.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

SCALE-01 - CANNOT DISPLAY MAP OF THIS SCALE WITH THIS CENTER LAT/LON.

MESSAGE TYPE: INFORMATION

CAUSE: The user selected a center LAT/LON where there is no map at the current scale.

PROGRAM ACTION: No action taken.

USER ACTION REQUIRED: Either move the center LAT/LON or select another scale.

SCALE-02 - CANNOT RESET MAP MAGNIFICATION.

MESSAGE TYPE: INFORMATION

CAUSE: The map software could not set the map magnification to the desired selection.

PROGRAM ACTION: No action taken.

USER ACTION REQUIRED: Select a different zoom level.

SCALE-03 - CENTER LAT/LON NOT ON MAP OF SELECTED SCALE.  
MAP SCALE NOT CHANGED.

MESSAGE TYPE: INFORMATION

CAUSE: The map software could not change the map to the new scale given the center LAT/LON.

PROGRAM ACTION: No action taken.

USER ACTION REQUIRED: No action required. Change center LAT/LON.

SCALE-04 - COVERAGE FOR SCALE IS MIN AND MAX LON <REAL> <REAL>  
MIN AND MAX LAT <REAL> <REAL>

MESSAGE TYPE: INFORMATION

CAUSE: The map software could not change the map to the new scale given the center LAT/LON.

PROGRAM ACTION: No action taken.

USER ACTION REQUIRED: Change the center LAT/LON.

SCENAR01 - MAP INITIALIZATION FAILED. CANNOT DISPLAY MAP  
AT DESIRED SCALE AND ZOOM FACTOR.

MESSAGE TYPE: INFORMATION

CAUSE: Could not find maps for the current scale.

PROGRAM ACTION: No action taken.

USER ACTION REQUIRED: Notify SCT; check map directory.

SEAD--01 - CANNOT SUPPRESS UNLESS ISRD IN SWCH = 1

MESSAGE TYPE: ERROR

CAUSE: There is not a statespace to suppress.

PROGRAM ACTION: No suppression done.

USER ACTION REQUIRED: Make sure ISRD in the SWCH table is equal to 1.

SEAD--02 - INVALID PENETRATION ALTITUDE LEVEL IAOPCU = <INTG>

MESSAGE TYPE: ERROR

CAUSE: Somehow IAOPCU is out of range.

PROGRAM ACTION: Returns to calling program.

USER ACTION REQUIRED: Notify SCT.

SEAPLY02 - CANNOT RECOGNIZE THRT TABLE

MESSAGE TYPE: ERROR

CAUSE: The subroutine TBRGZ was unable to recognize the THRT table.

PROGRAM ACTION: Return an invalid completion code to the calling subroutine and exit SEAPLY.

USER ACTION REQUIRED: Operational error. Verify file exists and is accessible and try again.

SEARCH01 - MAX NUMBER OF SECTIONS IN REPORT HAS BEEN EXCEEDED

MXJUMP = <INTG>

MESSAGE TYPE: ERROR

CAUSE: A report is too complicated; requiring more than the maximum allowed number of sections

PROGRAM ACTION: The report is aborted; control returns to the main menu.

USER ACTION REQUIRED: Modify the report so that it requires fewer sections.

SEARCH02 - MAX NUMBER OF SUBSCRIPTS FOR REPORT HAS BEEN EXCEEDED

MXSUBJ = <INTG>

MESSAGE TYPE: ERROR

CAUSE: A report is too complicated; requiring more than the maximum allowed number of lines for each record.

PROGRAM ACTION: The report is aborted; control returns to the main menu.

USER ACTION REQUIRED: Modify the report, by selecting fewer vector items.



SELASS01 - COULD NOT FIND ASSET

MESSAGE TYPE: INFORMATION

CAUSE: Trying to select an asset that is not there.

PROGRAM ACTION: No action taken.

USER ACTION REQUIRED: Select an asset that is there.

SLIDE-01 - GRAPHICALLY ENTER POINT TO SLIDE ...

MESSAGE TYPE: INFORMATION

CAUSE: The user wants to move a point to another place on the map.

PROGRAM ACTION: None.

USER ACTION REQUIRED: Use the mouse and click the point on the map that you wish to slide.

SLIDE-02 - NOW ENTER WHERE TO SLIDE ...

MESSAGE TYPE: INFORMATION

CAUSE: The user wants to move a point to another place on the map.

PROGRAM ACTION: None.

USER ACTION REQUIRED: Use the mouse and click the point on the map that you wish to slide the previous selected point to.

SLIDE-03 - SLIDE WITHIN SCALE FAILED

MESSAGE TYPE: INFORMATION

CAUSE: The point you want to slide or the place you want to put it is unreachable.

PROGRAM ACTION: None.

USER ACTION REQUIRED: Either slide the point to another place or exit and select another option from the menu.

SPAWN-01 - ERROR TRYING TO SPAWN

MESSAGE TYPE: ERROR

CAUSE: A SPAWN command has failed to take effect.

PROGRAM ACTION: Program execution continues normally at the SPECIAL menu.

USER ACTION REQUIRED: Contact the VAX/VMS system manager.

SPCSTA01 - ERROR PROCESSING STATES MENUS

MESSAGE TYPE: ERROR

CAUSE: The special states menu return the wrong values. The values returned should be the abbreviation for the TOBS or MASN files.

PROGRAM ACTION: The program does an error return to the SUPR main menu.

USER ACTION REQUIRED: The user will have to input the correct values into the SUPR special menu.

STATES01 - \*\*\*\*\*

STATES "<CHAR>" EXECUTING

MESSAGE TYPE: INFORMATION

CAUSE: Informs user that a statespace command is executing.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

STATES02 - CLEARING <CHAR> TO <REAL>

MESSAGE TYPE: INFORMATION

CAUSE: Informs user that TOBS or MASN array is being cleared.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

STATES03 - STATESPACE FILE NAMES MISSING IN FILE "ALGP"

MESSAGE TYPE: ERROR

CAUSE: The ALGP table does not contain the names of the multi-altitude statespace files, MASN.

PROGRAM ACTION: The statespace clear command is aborted. Program execution continues normally.

USER ACTION REQUIRED: Fix the ALGP so that the items NAC and MASN are correct.

STATES04 - STATE <CHAR> <CHAR> <CHAR>  
CPUTIM,WALLTIM,PAGEFLTS <REAL> <REAL> <REAL>

MESSAGE TYPE: INFORMATION

CAUSE: Informs the user at completion of a statespace command; shows the CPU seconds, wall clock seconds and page faults.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

STATES05 - ERROR PROCESSING STATES

MESSAGE TYPE: ERROR

CAUSE: An error has occurred in a statespace command. This may be due to not having opened a file.

PROGRAM ACTION: The statespace command is aborted. Program execution continues normally.

USER ACTION REQUIRED: Fix the procedural error. Then re-issue the statespace command.

STATES06 - THREAT <CHAR> HAS NOT BEEN TERRAIN MASKED

MESSAGE TYPE: INFORMATION

CAUSE: This threat has not been terrain masked.

PROGRAM ACTION: The program will not add this threat to the statespace. The program will continue processing the other threats that have been terrain masked.

USER ACTION REQUIRED: The user will have to go back and terrain mask the threats that have not been terrain masked.

STAVOD01 - <INTG> AVOIDANCE AREAS ADDED TO THE DANGER SPACE

MESSAGE TYPE: INFORMATION

CAUSE: Subroutine STAVOD has executed and added danger into the statespace for the avoidance areas (if any exist).

PROGRAM ACTION: Continue processing.

USER ACTION REQUIRED: None. This is an informational message only.

STCHAN01 - THREAT MODEL <CHAR> NOT FOUND

MESSAGE TYPE: ERROR

CAUSE: There is a threat for which the corresponding threat model record does not exist.

PROGRAM ACTION: The statespace add command is aborted. Program execution continues normally.

USER ACTION REQUIRED: Fix the THRT and/or TMDL table.

STCHAN02 - STATESPACE <CHAR> NOT FOUND

MESSAGE TYPE: ERROR

CAUSE: For a threat, none of the corresponding records in the threat model table point to the multi-altitude statespace being updated.

PROGRAM ACTION: The statespace add command is aborted. Program execution continues normally.

USER ACTION REQUIRED: Fix the THRT and/or TMDL table.

STCLER01 - CLEARING STATESPACE FILE: <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: Informs user that a statespace file is being cleared.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

STOJAM01 - BAD <CHAR> COORDINATES LAT = <REAL> LON = <REAL>

MESSAGE TYPE: ERROR

CAUSE: The co-ordinates of the jammer, penetrator or threat antenna do not fall in the range -90 <= Latitude <= +90 degrees; and -180 <= Longitude <= +180 degrees.

PROGRAM ACTION: EC calculations are aborted.

USER ACTION REQUIRED: Determine how the database has been corrupted; and correct the database.

STOJAM02 - ERROR CALCULATING SIGNAL TO JAM RATIO

MESSAGE TYPE: ERROR

CAUSE: This message appears along with STOJAM01.

PROGRAM ACTION: See STOJAM01.

USER ACTION REQUIRED: See STOJAM01.

SUPR--01 - INITIALIZATION OF GKS FAILED.  
PROCESSING WILL CONTINUE.

MESSAGE TYPE: WARNING

CAUSE: The graphics device could not be attached.

PROGRAM ACTION: Continues as if on an alphanumeric device.

USER ACTION REQUIRED: Contact maintenance personnel and provide them with a logfile.

TBDLET01 - ERROR = <INTG> CALLED BY <CHAR> CONCERNING TABLE <CHAR>  
UNABLE TO RECOGNIZE NAME

MESSAGE TYPE: ERROR

CAUSE: An attempt was made to delete records from a non-existent table.

PROGRAM ACTION: No records are deleted; program execution proceeds normally.

USER ACTION REQUIRED: Spell the name of the table correctly.

TBDLETO2 - ERROR = <INTG> CALLED BY <CHAR> CONCERNING TABLE <CHAR>  
UNABLE TO RECOGNIZE RECORD

MESSAGE TYPE: ERROR

CAUSE: An attempt was made to delete a non-existent record from a table.

PROGRAM ACTION: No records are deleted; program execution proceeds normally.

USER ACTION REQUIRED: Spell the name of the record correctly.

TBDLETO3 - ERROR = <INTG> : YOU CANNOT WRITE  
TO WRITE PROTECTED FILE = <CHAR>

MESSAG TYPE: WARNING

CAUSE: An attempt was made to delete records from a table to which the user does not have write access.

PROGRAM ACTION: No records are deleted; program execution proceeds normally.

USER ACTION REQUIRED: Change the initialization file (ZFCONT.DAT or ZSCONT.DAT) to give Read/Write access to the offending table.

TBINITO1 - NCORTB, ICORTB = <INTG> <INTG>

MESSAGE TYPE: DEBUG

CAUSE: Debug message of interest to program developers.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

TBINITO2 - TOO MANY TABLES - NOT ENOUGH LOGICAL UNITS MXLUNT = <INTG>

MESSAGE TYPE: ERROR

CAUSE: The database contains more than the maximum allowed number of tables.

PROGRAM ACTION: Program execution continues; but no further processing is possible.

USER ACTION REQUIRED: Contact an SCT Engineer: provide them with the log file, and show the value of NAMT for every record in the TSTR table.

TBINIT03 - TOO MANY TOTAL ITEMS    MXITEM = <INTG>

MESSAGE TYPE:    ERROR

CAUSE: The database contains more than the maximum allowed number of items.

PROGRAM ACTION: Program execution continues; but no further processing is possible.

USER ACTION REQUIRED: Contact an SCT Engineer; provide them with the log file, and show the value of NITM for every record in the TSTR table.

TBINIT04 - TOO MANY TOTAL RECORDS    NWTOT,MXRTOT = <INTG> <INTG>

MESSAGE TYPE:    ERROR

CAUSE: The database contains more than the maximum allowed number of records.

PROGRAM ACTION: Program execution continues; but no further processing is possible.

USER ACTION REQUIRED: Contact an SCT Engineer; provide them with the log file, and show the value of NXRC and ITYP for every record in the TSTR table.

TBINIT05 - ITEM <CHAR> IN TABLE <CHAR> HAS UNRECOGNIZED TYPE = <CHAR>

MESSAGE TYPE:    ERROR

CAUSE: The database contains an item whose type is not one of the allowed choices -- CHnn,INT,REAL,DATE,TIME,DTIM,LTLN or the name of another table.

PROGRAM ACTION: Program execution continues; but no further processing is possible.

USER ACTION REQUIRED: Contact an SCT Engineer; provide them with the log file, and show the value of NAMT for every record in the TSTR table, and the value of ITYP for the offending record in the TSTR table.

TBINIT06 - ITEM <CHAR> IN TABLE <CHAR> SIZE VARIABLE = <CHAR>  
DOESNT HAVE MAX DEFINED

MESSAGE TYPE: ERROR

CAUSE: The database contains a vector item whose maximum size is undefined.

PROGRAM ACTION: Program execution continues; but no further processing is possible.

USER ACTION REQUIRED: Contact an SCT Engineer; provide them with the log file, and show the value of NAMI and PAR2 for the offending record in the TSTR table.

TBINIT07 - TOO MANY ITEMS IN <CHAR>. MXTITM = <INTG>

MESSAGE TYPE: ERROR

CAUSE: The database contains a table with more than the maximum allowed number of items.

PROGRAM ACTION: Program execution continues; but no further processing is possible.

USER ACTION REQUIRED: Contact an SCT Engineer; provide them with the log file, and show the value of NITM for the offending record in the TSTR table.

TBOPEN01 - ERROR <INTG> CALLED BY <CHAR> CONCERNING TABLE <CHAR>  
UNABLE TO RECOGNIZE NAME

MESSAGE TYPE: ERROR

CAUSE: An attempt was made to open a non-existent table.

PROGRAM ACTION: The table is not opened; execution proceeds normally.

USER ACTION REQUIRED: Check for a procedural error (running in a directory without access to the files; spelling error in ZFCONT.DAT or ZSCONT.DAT; using an obsolete set of files from a previous delivery).



TBOPEN03 - ERROR = <INTG> CALLED BY <CHAR> CONCERNING TABLE <CHAR>  
READ ERROR OR END OF FILE ON LUN = <INTG>

MESSAGE TYPE: ERROR

CAUSE: The program was unable to read the records of a table.

PROGRAM ACTION: The table is not opened; execution proceeds normally.

USER ACTION REQUIRED: Check for a procedural error (running in a directory without access to the files; using an obsolete set of files from a previous delivery).

TBOPEN04 - ERROR = <INTG> CALLED BY <CHAR> CONCERNING TABLE <CHAR>  
HEADER READS <CHAR>  
<INTG> <INTG> <INTG> <INTG> <INTG> <INTG>  
ITODAY = <INTG>

MESSAGE TYPE: ERROR

CAUSE: The header record of a table does not have the correct information.

PROGRAM ACTION: The table is not opened; execution proceeds normally.

USER ACTION REQUIRED: Check for a procedural error (running in a directory without access to the files; using an obsolete set of files from a previous delivery).

TBOPEN05 - ERROR = <INTG> CALLED BY <CHAR> CONCERNING TABLE <CHAR>  
WRITE ERROR ON LUN = <INTG>

MESSAGE TYPE: ERROR

CAUSE: The program was unable to write the header record of a table.

PROGRAM ACTION: The table is not opened; execution proceeds normally.

USER ACTION REQUIRED: Check for a procedural error (running in a directory without access to the files; using an obsolete set of files from a previous delivery).

TBREAD01 - ERROR = <INTG> CALLED BY <CHAR> CONCERNING TABLE <CHAR>  
UNABLE TO RECOGNIZE TABLE NAME

MESSAGE TYPE: ERROR

CAUSE: An attempt was made to read a record from a non-existent table.

PROGRAM ACTION: No record is read; execution continues normally.

USER ACTION REQUIRED: Spell the name of the table correctly.

TBREAD02 - ERROR = <INTG> CALLED BY <CHAR> CONCERNING TABLE <CHAR>  
UNABLE TO RECOGNIZE RECORD

MESSAGE TYPE: ERROR

CAUSE: An attempt was made to read a non-existent record from a table.

PROGRAM ACTION: No record is read; execution continues normally.

USER ACTION REQUIRED: Spell the name of the record correctly.

TBREAD03 - RECORD NAME WAS <CHAR>

MESSAGE TYPE: ERROR

CAUSE: This message goes with TBREAD02.

PROGRAM ACTION: See TBREAD02.

USER ACTION REQUIRED: See TBREAD02.

TBREAD04 - RECORD NAME WAS <CHAR>

MESSAGE TYPE: ERROR

CAUSE: This message goes with TBREAD02.

PROGRAM ACTION: See TBREAD02.

USER ACTION REQUIRED: See TBREAD02.

TBREAD05 - RECORD NUMBER WAS <INTG>

MESSAGE TYPE: ERROR

CAUSE: This message goes with TBREAD02.

PROGRAM ACTION: See TBREAD02.

USER ACTION REQUIRED: See TBREAD02.

TBWRT01 - ERROR = <INTG> CALLED BY <CHAR> CONCERNING TABLE <CHAR>  
UNABLE TO RECOGNIZE NAME

MESSAGE TYPE: ERROR

CAUSE: An attempt was made to write a record to a non-existent table.

PROGRAM ACTION: No record is written; execution continues normally.

USER ACTION REQUIRED: Spell the name of the table correctly.

TBWRIT02 - ERROR = <INTG> CALLED BY <CHAR> CONCERNING TABLE <CHAR>  
NO ROOM TO WRITE RECORD

MESSAGE TYPE: ERROR

CAUSE: An attempt was made to write a record to a full table.

PROGRAM ACTION: No record is written; execution continues normally.

USER ACTION REQUIRED: Delete some records from the table.

TBWRIT03 - ERROR = <INTG> NO PRIVILEGE FOR WRITE TO TABLE <CHAR>

MESSAGE TYPE: ERROR

CAUSE: An attempt was made to write a record to a table to which the user does not have write access.

PROGRAM ACTION: No record is written; program execution proceeds normally.

USER ACTION REQUIRED: Change the initialization file (ZFCONT.DAT or ZSCONT.DAT) to give Read/Write access to the offending table.

TCNODE01 - NO ROOM IN CORN FOR CORRIDOR POINT <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The number of corridor node points exceeds the maximum allowed.

PROGRAM ACTION: The node command will continue to process, in order to see if any more diagnostics occur.

USER ACTION REQUIRED: Delete some corridor nodes from CORR.

TCNODE02 - TRANSIT POINT <CHAR> OUTSIDE SPACE

MESSAGE TYPE: ERROR

CAUSE: A corridor node lies outside the scenario.

PROGRAM ACTION: The node command will continue to process, in order to see if any more diagnostics occur.

USER ACTION REQUIRED: Correct the value of X (latitude/longitude) in the CORR table.

TCNODE07 - ERROR PROCESSING TRANSIT CORRIDOR NODES

MESSAGE TYPE: ERROR

CAUSE: A general error message to indicate that one or more of the previous errors has occurred.

PROGRAM ACTION: The node command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: See previous messages.

TCNODE08 - UNABLE TO RECOGNIZE NAME = <CHAR>  
TRANSIT CORRIDOR NODES NOT PROCESSED

MESSAGE TYPE: ERROR

CAUSE: The program cannot recognize the CORR table.

PROGRAM ACTION: The node command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: Correct the procedural error (Operating in the wrong directory; using an obsolete set of files; spelling error in ZFCNT.DAT).

TCNODE09 - NO RECORDS IN CORR TABLE TRANSIT CORRIDORS NOT PROCESSED

MESSAGE TYPE: ERROR

CAUSE: There are no transit points.

PROGRAM ACTION: The node command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: Add records to the CORR table.

TCOPSQ07 - WRITING TREE FOR TRANSIT CORRIDOR POINT <CHAR> WILL OVERFLOW  
ARRAY

MESSAGE TYPE: ERROR

CAUSE: The number of routes in a transit corridor tree exceeds the maximum allowed.

PROGRAM ACTION: The node command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: Decrease the number of transit nodes accessible to bases or to the FEBA.

TCOPSQ08 - ERROR WRITING TREE FOR TRANSIT POINT <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The program was unable to write records to the TREE array.

PROGRAM ACTION: The node command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: Check that ZFCONT.DAT opens TREE as "SR/W"; that the user is running in a directory with write access to the TREE file.

TCOPSQ11 - ERROR WRITING HEADER INFO FOR TREE ARRAY

MESSAGE TYPE: ERROR

CAUSE: The program was unable to write records to the TREE array.

PROGRAM ACTION: The node command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: Check that ZFCONT.DAT opens TREE as "SR/W"; that the user is running in a directory with write access to the TREE file.

TCOPSQ12 - ERROR BUILDING TREE FOR TRANSIT CORRIDOR POINT <CHAR>

MESSAGE TYPE: ERROR

CAUSE:

PROGRAM ACTION:

USER ACTION REQUIRED: Contact an SCT Engineer.

TGNODE01 - TARGET <CHAR> OUTSIDE STATESPACE

MESSAGE TYPE: WARNING

CAUSE: A target lies outside the statespace.

PROGRAM ACTION: The node command will continue to process. in order to see if any more diagnostics occur.

USER ACTION REQUIRED: This target will not be considered. If this is not acceptable, contact the data base controller about enlarging the scenario.

TGNODE03 - TARGET <CHAR> NOT ADDED TO NLIS--NOT ENOUGH ROOM

MESSAGE TYPE: ERROR

CAUSE: The number of targets exceeds the maximum allowed value.

PROGRAM ACTION: The node command will continue to process, in order to see if any more diagnostics occur.

USER ACTION REQUIRED: Delete some of the records from the TGT table.

TGNODE04 - UNABLE TO RECOGNIZE NAME = <CHAR>  
TARGET NODES NOT PROCESSED

MESSAGE TYPE: ERROR

CAUSE: The program cannot recognize the TGT table.

PROGRAM ACTION: The node command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: Correct the procedural error (Operating in the wrong directory; using an obsolete set of files; spelling error in ZFCONT.DAT).

TGNODE05 - THERE ARE NO <CHAR> RECORDS. TARGETS NOT PROCESSED

MESSAGE TYPE: ERROR

CAUSE: There are no targets.

PROGRAM ACTION: The node command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: Add records to the TGT table.

TGTPRC02 - NO PREVIOUS LINE, ALREADY ON FIRST LINE

MESSAGE TYPE: INFORMATION

CAUSE: User attempted to move to a previous record when he was on the first record already.

PROGRAM ACTION: None.

USER ACTION REQUIRED: None.

TGTPRC03 - LAST LINE REMOVED FROM THIS SECTION,  
REINITIALIZING SECTION AND STARTING OVER

MESSAGE TYPE: INFORMATION

CAUSE: User removed the last line from the section he was working on.

PROGRAM ACTION: The section is reinitialized and the user is allowed to begin working on it again.

USER ACTION REQUIRED: None.

TIMEID01 - UNABLE TO RECOGNIZE THRT

MESSAGE TYPE: ERROR

CAUSE: The program cannot recognize the THRT table.

PROGRAM ACTION: The program will be unable to find ID's of threats; execution continues normally.

USER ACTION REQUIRED: Correct the procedural error (Operating in the wrong directory; using an obsolete set of files; spelling error in ZFCONT.DAT).

TIMEID02 - ERROR READING RECORDS IN THRT TABLE

MESSAGE TYPE: ERROR

CAUSE: The program was unable to read the records of the THRT table.

PROGRAM ACTION: The program will be unable to find ID's of threats; execution continues normally.

USER ACTION REQUIRED: Check for a procedural error (running in a directory without access to the files; using an obsolete set of files from a previous delivery).

TIMEID03 - ERROR PROCESSING DATA BASE MANAGER  
ERROR ON FILE <CHAR>

MESSAGE TYPE: ERROR

CAUSE: Error in REAC .n array tree.

PROGRAM ACTION: Abort subroutine.

USER ACTION REQUIRED: Check array tree.

TIMEID04 - PARAMETER MXID EXCEEDED WHEN DISPLAYING IDS

MESSAGE TYPE: ERROR

CAUSE: Parameter MXID is dimensioned improperly.

PROGRAM ACTION: Stop displaying rest of IDs.

USER ACTION REQUIRED: This should never happen. Report to SCT.

TPDRIV01 - HIT CARRIAGE RETURN TO CONTINUE WITH GRAPHICS INPUT

MESSAGE TYPE: INFORMATION

CAUSE: The software is waiting for a users response.

PROGRAM ACTION: No action.

USER ACTION REQUIRED: Hit the RETURN key.

TR2DRD01 - ERROR = <INTG> CALLED BY <CHAR> CONCERNING ARRAY TERR  
CANT READ OVER 2 COLUMNS -- IP,NI,NJ <INTG> <INTG> <INTG>

MESSAGE TYPE: ERROR

CAUSE: An illegal attempt was made to read terrain data which spanned 2 or more columns of longitude.

PROGRAM ACTION: Terrain masking or terrain contour plotting is aborted; program execution continues normally.

USER ACTION REQUIRED: Check for a procedural error (running in a directory without access to Terrain file; spelling error in ZFCNT.DAT or ZSCNT.DAT; using an obsolete set of files from a previous delivery).



TR2DRD02 - ERROR = <INTG> CALLED BY <CHAR>  
CONCERNING ARRAY TERR SUBSCRIPT ERROR --  
IP(4) <INTG> <INTG> <INTG> <INTG>  
IDEL,JDEL,NI,NJ = <INTG> <INTG> <INTG> <INTG>

MESSAGE TYPE: ERROR

CAUSE: An illegal attempt was made to read terrain with invalid subscript values.

PROGRAM ACTION: Terrain masking or terrain contour plotting is aborted; program execution continues normally.

USER ACTION REQUIRED: Check for a procedural error (running in a directory without access to Terrain file; spelling error in ZFCONT.DAT or ZSCONT.DAT; using an obsolete set of files from a previous delivery).

TR2DRD03 - ERROR = <INTG> CALLED BY <CHAR>  
CONCERNING ARRAY TERR READ ERROR ON LUN = <INTG>

MESSAGE TYPE: ERROR

CAUSE: A read error occurred while attempting to read terrain.

PROGRAM ACTION: Terrain masking or terrain contour plotting is aborted; program execution continues normally.

USER ACTION REQUIRED: Check for a procedural error (running in a directory without access to Terrain file; spelling error in ZFCONT.DAT or ZSCONT.DAT; using an obsolete set of files from a previous delivery).

TRCLOS01 - DROP OFF POINT BEFORE FIRST POINT IN LLTR <CHAR>

MESSAGE TYPE: WARNING

CAUSE: The first point in the LLTR is on the hostile side of the IFF-ON line.

PROGRAM ACTION: Makes transit corridor connection to drop off point only.

USER ACTION REQUIRED: None.

TRCLOS02 - ERROR FINDING TRANSIT CORRIDOR ACCESS FOR LLTR <CHAR>

MESSAGE TYPE: ERROR

CAUSE:

PROGRAM ACTION:

USER ACTION REQUIRED: Contact an SCT Engineer.

TRCLOS03 - POINT <CHAR> EXCEEDS LLTR ACCESSIBILITY DISTANCE FOR  
LLTR <CHAR> YET IT HAS BEEN MADE ACCESSIBLE

MESSAGE TYPE: WARNING

CAUSE: The specified point is outside the maximum accessibility distance for LLTR's, but has been made accessible anyway.

PROGRAM ACTION: Connect LLTR to specified point.

USER ACTION REQUIRED: None.

TRNODE01 - INVALID NUMBER OF POINTS IN LLTR <CHAR> NPTS = <INTG>

MESSAGE TYPE: ERROR

CAUSE: The number of transit points for an LLTR is less than 1 or greater than the maximum allowed.

PROGRAM ACTION: The node command will continue to process, in order to see if any more diagnostics occur.

USER ACTION REQUIRED: Correct the value of NPTS in the LLTR table.

TRNODE06 - LCLBLK <INTG> OF LLTR <CHAR> HAS AN INVALID VALUE = <INTG>

MESSAGE TYPE: ERROR

CAUSE: The value of LCLBLK(i) is neither 0 (Off for the ith block); nor 1 (on for the ith block).

PROGRAM ACTION: The node command will continue to process, in order to see if any more diagnostics occur.

USER ACTION REQUIRED: Correct the value of LCLBLK in the LLTR table.

TRNODE07 - LLTR <CHAR> DOES NOT INTERSECT IFF-ON LINE

MESSAGE TYPE: WARNING

CAUSE: The LLTR network does not cross the IFF-ON line.

PROGRAM ACTION: The node command will continue to process, in order to see if any more diagnostics occur.

USER ACTION REQUIRED: Correct the value of POIN in the LLTR table, or X in the CORR table; or use the Database command to redo the FLOT.

TRNODE08 - LLTR <CHAR> DOES NOT INTERSECT IFF-OFF LINE

MESSAGE TYPE: WARNING

CAUSE: The LLTR network does not cross the IFF-OFF line.

PROGRAM ACTION: The node command will continue to process, in order to see if any more diagnostics occur.

USER ACTION REQUIRED: Correct the value of POIN in the LLTR table, or X in the CORR table; or use the Database command to redo the FLOT.

TRNODE09 - CANNOT ADD IFF-OFF POINT FOR LLTR <CHAR> TO NLIS--  
TOO MANY LLTRS

MESSAGE TYPE: ERROR

CAUSE: The total number of IFF-OFF crossing points on all LLTR networks exceeds the maximum allowed.

PROGRAM ACTION: The node command will continue to process, in order to see if any more diagnostics occur.

USER ACTION REQUIRED: Delete one or more records from LLTR.

TRNODE10 - CANNOT ADD IFF-ON POINT FOR LLTR <CHAR> TO NLIS--  
TOO MANY LLTRS

MESSAGE TYPE: ERROR

CAUSE: The total number of IFF-ON crossing points on all LLTR networks exceeds the maximum allowed.

PROGRAM ACTION: The node command will continue to process, in order to see if any more diagnostics occur.

USER ACTION REQUIRED: Delete one or more records from LLTR.

TRNODE12 - TRANSIT POINT <CHAR> IS OUT OF SCENARIO

MESSAGE TYPE: ERROR

CAUSE: A transit point on an LLTR network is outside the scenario.

PROGRAM ACTION: The node command will continue to process, in order to see if any more diagnostics occur.

USER ACTION REQUIRED: Correct the value of X in the CORR table.

TRNODE13 - THERE ARE NO ACTIVE LLTRS DURING TIMEBLOCK <INTG>

MESSAGE TYPE: WARNING

CAUSE: No LLTRs are active during a timeblock.

PROGRAM ACTION: The node command will continue to process, in order to see if any more diagnostics occur.

USER ACTION REQUIRED: Correct the value of IBLK in one or more records in LLTR, or add more records into the LLTR table.

TRNODE14 - ERROR PROCESSING LLTRS. NODES NOT COMPLETE

MESSAGE TYPE: ERROR

CAUSE: A general error message to indicate that one or more of the specific errors (TRNODE01 - TRNODE13) has occurred.

PROGRAM ACTION: The node command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: See TRNODE01-TRNODE13.

TRNODE15 - UNABLE TO RECOGNIZE NAME = <CHAR>  
LLTR NODES NOT PROCESSED

MESSAGE TYPE: ERROR

CAUSE: The program cannot recognize the LLTR table.

PROGRAM ACTION: The node command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: Correct the procedural error (Operating in the wrong directory; using an obsolete set of files: spelling error in ZFCNT.DAT).

TRNODE16 - NO RECORDS IN LLTR TABLE. LLTR NODES NOT PROCESSED

MESSAGE TYPE: WARNING

CAUSE: There are no LLTR networks.

PROGRAM ACTION: The node command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: Add records to the LLTR table.

TRNODE17 - FLOT RECORD <CHAR> HAS INVALID NUMBER OF POINTS = <INTG>  
LLTR NODES NOT PROCESSED

MESSAGE TYPE: ERROR

CAUSE: The number of points in the IFF-OFF line or the IFF-ON line is less than 2 or exceeds the maximum allowed.

PROGRAM ACTION: The node command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: Change NPTS in the offending record(s) in the FEAT table, or redo the FLOT using the Database command.

TRNODE18 - CANNOT RECOGNIZE PREFERRED TRANSIT CORRIDOR POINT <CHAR>  
FOR LLTR <CHAR>

MESSAGE TYPE: WARNING

CAUSE: Program is unable to recognize the specified transit corridor point.

PROGRAM ACTION: Do not connect point, but continue processing.

USER ACTION REQUIRED: None.

TRNODE19 - ERROR CALCULATING CORRIDOR ACCESS FROM POINT <CHAR> TO  
LLTR <CHAR> IGNORING THE POINT

MESSAGE TYPE: WARNING

CAUSE:

PROGRAM ACTION:

USER ACTION REQUIRED: Contact an SCT Engineer.

TRNODE20 - POINT <CHAR> EXCEEDS LLTR ACCESSIBILITY DISTANCE FOR  
LLTR <CHAR> YET IT HAS BEEN MADE ACCESSIBLE

MESSAGE TYPE: WARNING

CAUSE: The specified point is outside the maximum accessibility  
distance for LLTR's, but has been made accessible anyway.

PROGRAM ACTION: Connect LLTR to specified point.

USER ACTION REQUIRED: None.

TRNODE21 - <INTG> ACCESSIBLE POINTS REQUESTED FOR LLTR <CHAR> BUT  
ONLY <INTG> FOUND

MESSAGE TYPE: WARNING

CAUSE: More connections into the specified LLTR were requested,  
than could be found.

PROGRAM ACTION: Process the next LLTR.

USER ACTION REQUIRED: None.

TRNODE22 - ERROR CALCULATING PERFORMANCE ON LLTR <CHAR>

MESSAGE TYPE: ERROR

CAUSE:

PROGRAM ACTION:

USER ACTION REQUIRED: Contact an SCT Engineer.

TROPEN02 - ERROR = <INTG> CALLED BY <CHAR> CONCERNING TERRAIN FILE  
READ ERROR ON LUN = <INTG>

MESSAGE TYPE: ERROR

CAUSE: The program was unable to read the records of the terrain file.

PROGRAM ACTION: The file is not opened; execution proceeds normally.

USER ACTION REQUIRED: Check for a procedural error (running in a  
directory without access to the files; using an obsolete set of  
files from a previous delivery).

TRPERF01 - INVALID NAC = <INTG> IN ALGP TABLE

MESSAGE TYPE: ERROR

CAUSE:

PROGRAM ACTION:

USER ACTION REQUIRED: Contact an SCT Engineer.

TRUSER01 - ERROR = <INTG> CALLED BY <CHAR>  
BYTE-PACKED FILE IS UNOPENED

MESSAGE TYPE: ERROR

CAUSE: An attempt was made to access a terrain file which had not been opened.

PROGRAM ACTION: Terrain masking or terrain contour plotting is aborted; program execution continues normally.

USER ACTION REQUIRED: Check for a procedural error (running in a directory without access to Terrain file; spelling error in ZFCNT.DAT or ZSCNT.DAT; using an obsolete set of files from a previous delivery).

TSTVAL01 - VALUE FOR <CHAR> (<INTG>) = <REAL>  
VALUE WILL BE SET TO MINIMUM = <REAL>

MESSAGE TYPE: WARNING

CAUSE: The value supplied for a database item is less than the minimum allowed for the item.

PROGRAM ACTION: The database accepts the minimum allowed value, rather than the value supplied.

USER ACTION REQUIRED: No action is required.

TSTVAL02 - VALUE FOR <CHAR> (<INTG>) = <REAL>  
VALUE WILL BE SET TO MAXIMUM = <REAL>

MESSAGE TYPE: WARNING

CAUSE: The value supplied for a database item is greater than the maximum allowed for the item.

PROGRAM ACTION: The database accepts the maximum allowed value, rather than the value supplied.

USER ACTION REQUIRED: No action is required.

TTNODE01 - TANKER TRAK <CHAR> HAS BAD NPTS = <INTG>

MESSAGE TYPE: ERROR

CAUSE: The number of points for a tanker track is less than 1 or greater than the maximum allowed.

PROGRAM ACTION: The node command will continue to process, in order to see if any more diagnostics occur.

USER ACTION REQUIRED: Correct the value of NPTS in the TRAK table.

UPDATE01 - UPDATE FINISHED: <INTG> THREATS DELETED  
<INTG> THREATS ADDED

MESSAGE TYPE: INFORMATION

CAUSE: Informs the user that UPDATE has successfully completed.

PROGRAM ACTION: Execution continues from SUPR Main Menu.

USER ACTION REQUIRED: None

UPDTID01 - TOO MANY IDS - EXCEEDING LIMIT

MESSAGE TYPE: INFORMATION

CAUSE: The number of IDs exceeds the maximum allowed.

PROGRAM ACTION: The update of the IDs is terminated.

USER ACTION REQUIRED: Check the number of IDs and try again.

UPDTID02 - PLEASE SELECT BEFORE THIS OPTION

MESSAGE TYPE: INFORMATION

CAUSE: The user has not selected the SELECT THREAT or DEFNSE option.

PROGRAM ACTION: No action.

USER ACTION REQUIRED: Select the SELECT THREAT or DEFNSE option.



UPTASK01 - NUMBER OF TASKINGS FOR UNIT <CHAR> EXCEEDS THE MAXIMUM  
ALLOWABLE NUMBER <INTG> TASKINGS WILL BE STORED

MESSAGE TYPE: WARNING

CAUSE: The number of taskings for the unit has exceeded the allowed maximum.

PROGRAM ACTION: The current tasking for the unit will not be saved. The plan is accepted.

USER ACTION REQUIRED: ATO and ATMs for this unit may be bad. Consider changing plans so that the data will be good.

UPTASK02 - CANNOT FIND UNIT NAME <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The name of the unit for attack aircraft, or tankers or EC support aircraft does not match one of the known unit names. Data base is inconsistent.

PROGRAM ACTION: The plan is not accepted. Execution continues normally.

USER ACTION REQUIRED: Check the AIRS and DMPI tables and reallocate the data through the Plan menus.

UPTASK03 - UNABLE TO UPDATE TASKING HISTORY - PLANNING RESULTS ARE  
QUESTIONABLE

MESSAGE TYPE: ERROR

CAUSE: This is a general error message associated with a particular error in reading or writing one of the database files.

PROGRAM ACTION: The plan is not accepted. Execution continues normally.

USER ACTION REQUIRED: Correct the problem denoted by the database error message (TBREAD--,TBWRIT--,ARREAD--,ARWRIT--).

UPTASK04 - UNIT <CHAR> IS OVERTASKED.

PLEASE REALLOCATE THIS PLAN AND THEN TRY AGAIN TO ACCEPT IT.  
IF THIS IS A SUPPORT UNIT, THEN PLEASE REDUCE ITS TASKING.

MESSAGE TYPE: WARNING

CAUSE: The plan accept logic has determined that this unit is overtasked. The user has either overtasked a support unit, or has allocated and accepted plans out of sequence.

PROGRAM ACTION: No action taken. The accepted plan is stored.

USER ACTION REQUIRED: The user should either reduce the tasking on the support unit, or reallocate the plan.

UPTASK05 - WEAPONS: <CHAR> AT BASE: <CHAR> ARE OVERTASKED

MESSAGE TYPE: WARNING

CAUSE: A Plan has been accepted that causes the weapon at the base to be overtasked. In other words, more weapons have been tasked than are available at the base.

PROGRAM ACTION: Continue processing. This tasking will be kept in the ATO.

USER ACTION REQUIRED: None is required. However, if this concerns you, then you should check the BASE table and the accepted PLAN records to find out why the weapons have been overcommitted.

WEAPNR01 - \*\*\*\*\*

WEAPNR EXECUTING

MESSAGE TYPE: INFORMATION

CAUSE: Informs the user that the weaponeering module is executing.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

WEAPNR02 - UNABLE TO FIND A PRESTORED WEAPONNEERING SOLUTION  
DMPI <CHAR> TYPE <CHAR>  
PLEASE ENTER A SOLUTION FOR THIS DMPI

MESSAGE TYPE: WARNING

CAUSE: There is no data in the WEAP table for this DMPI.

PROGRAM ACTION: Continue processing the rest of the DMPIs.

USER ACTION REQUIRED: The user must manually input at least one complete weaponneering solution into the DMPI table.

WEAPNR06 - <INTG> WEAPONNEERING SOLUTIONS FOR TARGET <CHAR> DMPI <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: Shows number of weaponneering solutions found as weaponneering is completed for each target.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

WEAPNR07 - WEAPONNEERING DMPI: <CHAR> FOR TARGET: <CHAR>  
CLASS: <CHAR> TYPE: <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: About to weaponneer a dmpi.

PROGRAM ACTION: Attempt to weaponneer the dmpi.

USER ACTION REQUIRED: None. If it has trouble weaponneering this dmpi, then note the CLASS and TYPE.

WEAPNR08 - UNIT: <CHAR> WAS CONSIDERED

MESSAGE TYPE: INFORMATION

CAUSE: No weaponneering solutions were found for this DMPI. A second pass is performed to provide diagnostics. This unit's role matches the dmpi's class and so was considered. The failure diagnostics follow.

PROGRAM ACTION: Note that this unit was considered. Use this when you troubleshoot the database.

USER ACTION REQUIRED: None.

WEAPNR09 - THERE ARE NO <CHAR> WEAPONEERING SOLUTIONS IN THE WEAP TABLE

MESSAGE TYPE: INFORMATION

CAUSE: There are no weaponeering solutions for this DMPI. This diagnostic tells the user that this unit was not weaponeered because there are no weaponeering solutions in the WEAP table for this type of aircraft.

PROGRAM ACTION: Continue.

USER ACTION REQUIRED: None. Use this information when you troubleshoot the database.

WEAPNR10 - SOLUTION: <CHAR> WITH <INTG> <CHAR>  
WEAPONS NOT AVAILABLE AT BASE <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: There are no weaponeering solutions for this DMPI. This solution was not used because there are not weapons of this type at the base.

PROGRAM ACTION: Continue processing.

USER ACTION REQUIRED: None. Use this information when troubleshooting the database.

WEAPNR11 - AIRCRAFT TYPE <CHAR> CANNOT CARRY THE LOAD: <INTG> <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: There are no weaponeering solutions for this DMPI. This solution was not used because this is not an acceptable load for this aircraft. The ACFT and WEAP tables are inconsistent.

PROGRAM ACTION: Continue processing.

USER ACTION REQUIRED: Check the database. Either the ACFT or WEAP table is in error.

WEAPNR12 - THERE ARE NO UNITS OF ROLE <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: There are no weaponeering solutions for this DMPI. There are no units in the AIRS table with roles that match this DMPI's CLAS.

PROGRAM ACTION: Continue processing.

USER ACTION REQUIRED: Please review the database. Use the EIFEL preprocessor to change the DMPI class or the unit roles.

WEAPNR13 - UNABLE TO WEAPONER USING TYPE. ATTEMPTING LOOKUP  
WITH OBJECTIVE <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: The program was unable to successfully weaponer the DMPI  
using the TYPE designated in the DMPI table.

PROGRAM ACTION: The program attempts to reweaponer using the  
objective in the OBJ field of the DMPI table.

USER ACTION REQUIRED: No user action is required.

WEAPNR14 - SECONDARY LOOKUP FAILED. ATTEMPTING BEST FIT.

MESSAGE TYPE: INFORMATION

CAUSE: The program failed the secondary weaponer lookup.

PROGRAM ACTION: The program attempts a best fit lookup using  
a minimum of two character identifier match.

USER ACTION REQUIRED: No user action is required.

WEAPNR15 - BEST FIT MATCH FOR OBJ <CHAR> IS <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: The program was able to successfully find a best fit  
(minimum of two characters matching) lookup for weaponer the dmpi.

PROGRAM ACTION: The program will weaponer using the named match.

USER ACTION REQUIRED: No user action is required.

WEAPNR16 - OBJECTIVE WEAPONER FAILED ATTEMPTING BEST FIT

MESSAGE TYPE: INFORMATION

CAUSE: The program was unable to weaponer using the primary or  
objective field lookups for the current dmpi.

PROGRAM ACTION: The program will attempt a best fit lookup based  
on the next closest match to the objective.

USER ACTION REQUIRED: No user action is required.

WEATHRO1 - UNABLE TO RECOGNIZE TABLE NAME <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The program cannot recognize the FEAT or FTYP table.

PROGRAM ACTION: The Plan Allocate command is aborted; execution continues normally.

USER ACTION REQUIRED: Correct the procedural error (Operating in the wrong directory; using an obsolete set of files; spelling error in ZFCONT.DAT).

WEATHRO2 - UNABLE TO OPEN TABLE - <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The program cannot read a record in the FEAT table.

PROGRAM ACTION: The Plan Allocate command is aborted; execution continues normally.

USER ACTION REQUIRED: Correct the procedural error (Operating in the wrong directory; using an obsolete set of files; spelling error in ZFCONT.DAT).

WEATHRO3 - BAD ROUTE, GOES THROUGH THE WEATHER POLYGON

MESSAGE TYPE: DEBUG

CAUSE: This message informs the user why a candidate mission is rejected.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

WEATHRO5 - GOOD ROUTE FOR THE AIRCRAFT AND WEATHER

MESSAGE TYPE: DEBUG

CAUSE: This message informs the user that a mission passes the weather tests.

PROGRAM ACTION: Program execution continues normally.

USER ACTION REQUIRED: No action is required.

WRIFF-01 - ERROR CONVERTING OUTPUT TO UTMS OR DMS.  
OUTPUT WILL BE IN DECIMAL LAT/LONS.

MESSAGE TYPE: INFORMATION

CAUSE: The program attempted to convert the internal decimal lat/lons it work with to a UTM or DMS format for output. In doing so the program encountered an error.

PROGRAM ACTION: The program will output the data in decimal lat/lons instead of the more legible degrees, minutes, decimal seconds or UTM's.

USER ACTION REQUIRED: None

WRMISN01 - TARGET NOT IN PROPER RANGE

MESSAGE TYPE: WARNING

CAUSE: The target cannot be found in the NLIS array.

PROGRAM ACTION: The mission review or Analyze command is aborted; execution continues normally.

USER ACTION REQUIRED: Data base is inconsistent. Re-allocate through the Plan Menus.

WRMSRP01 - NO MISSIONS HAVE BEEN CREATED FOR THIS TARGET

MESSAGE TYPE: INFORMATION

CAUSE: In writing out possible mission data to a report file this message occurred.

PROGRAM ACTION: No action taken; no report made.

USER ACTION REQUIRED: Find out why no missions were created for the target.

WRMSRP02 - TARGET NOT IN PROPER RANGE

MESSAGE TYPE: WARNING

CAUSE: The target cannot be found in the NLIS array.

PROGRAM ACTION: The mission review or Analyze command is aborted; execution continues normally.

USER ACTION REQUIRED: Data base is inconsistent. Re-allocate through the Plan Menus.

WRMSSN01 - ACCEPTING MISSION <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: A mission is being accepted as part of a plan.

PROGRAM ACTION: Accept the mission.

USER ACTION REQUIRED: None.

WRMSSN02 - ACCEPTING TANKER MISSION <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: Accepting a tanker mission as part of a plan.

PROGRAM ACTION: Accept the tanker mission.

USER ACTION REQUIRED: None.

WRMSSN03 - ACCEPTING EC MISSION <CHAR>

MESSAGE TYPE: INFORMATION

CAUSE: Accepting an EC mission as part of a plan.

PROGRAM ACTION: Accept the EC mission.

USER ACTION REQUIRED: None.

WRPERF01 - TARGET NOT IN PROPER RANGE

MESSAGE TYPE: WARNING

CAUSE: The target cannot be found in the NLIS array.

PROGRAM ACTION: The show perf command is aborted; execution continues normally.

USER ACTION REQUIRED: Contact an SCT Engineer; provide them with the log file; and show NLIS, and the the contents of all records in the TGT table.



WRTAB001 - START TIME MUST BE LESS THAN END TIME  
PLEASE TRY AGAIN START = <CHAR> END = <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The end time supplied is less than the start time.

PROGRAM ACTION: Execution proceeds from the TABO START menu.

USER ACTION REQUIRED: Enter The start and end times again.

WRTAB002 - UNABLE TO RECOGNIZE NAME = <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The program cannot recognize the FREQ table.

PROGRAM ACTION: The Show TABO command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: Correct the procedural error (Operating in the wrong directory; using an obsolete set of files; spelling error in ZFCONT.DAT).

WRTAB003 - ERROR READING <CHAR> TABLE

MESSAGE TYPE: ERROR

CAUSE: The program cannot read a record in the FREQ table.

PROGRAM ACTION: The Show TABO command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: Correct the procedural error (Operating in the wrong directory; using an obsolete set of files; spelling error in ZFCONT.DAT).

WRTAB004 - IMPENDING ARRAY OVERFLOW MXFREQ = <INTG>

MESSAGE TYPE: ERROR

CAUSE: The number of frequencies in the TABOO list for the current time interval exceeds the maximum allowed.

PROGRAM ACTION: The Show TABO command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: Select a narrower time window, or delete some records from the FREQ table.

WRTAB005 - THERE ARE NO RECORDS IN THE FREQ TABLE

MESSAGE TYPE: INFORMATION

CAUSE: There are no records in the FREQ table.

PROGRAM ACTION: The Show TABO command is aborted; execution continues normally from the SHOW menu.

USER ACTION REQUIRED: Add some records to the FREQ table.

WRTASK01 - UNABLE TO RECOGNIZE NAME = <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The program cannot recognize the AIRS table.

PROGRAM ACTION: The Show TASK command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: Correct the procedural error (Operating in the wrong directory; using an obsolete set of files; spelling error in ZFCONT.DAT).

WRTASK02 - NO UNITS IN TASK ARRAY, PLEASE EXECUTE PLAN

MESSAGE TYPE: WARNING

CAUSE: There are no units in the TASK array; this means that no accepted plans have been generated.

PROGRAM ACTION: No TASK output is produced; program execution continues normally.

USER ACTION REQUIRED: Generate one or more plans.

WRTASK03 - THERE ARE NO RECORDS IN THE AIRS TABLE

MESSAGE TYPE: INFORMATION

CAUSE: There are no records in the AIRS table.

PROGRAM ACTION: The Show TASK command is aborted; execution continues normally from the SHOW menu.

USER ACTION REQUIRED: Add some records to the AIRS table.

WRTASK04 - UNABLE TO FIND THIS PLAN TABLE RECORD.  
PLEASE REVIEW CONTENTS OF THE PLAN TABLE.  
MAKE SURE THAT NO ACCEPTED PLANS HAVE BEEN DELETED.

MESSAGE TYPE: WARNING

CAUSE: Unable to find an accepted PLAN table record. The record has probably been accidentally deleted.

PROGRAM ACTION: Return to the database menu.

USER ACTION REQUIRED: Please review the records in your plan table. If you have deleted a record you will have to recreate it and accept it again before you can write out the ATO.

WRTMNU02 - INCORRECT VALUE FOR TYPE PASSED TO ROUTINE WRTMNU

MESSAGE TYPE: ERROR

CAUSE: The menu type is neither 'F' (fixed) nor 'V' (variable).

PROGRAM ACTION: The menu is aborted; execution proceeds from the main menu.

USER ACTION REQUIRED: Check for a procedural error (using an obsolete version of the program or of the file MENUOUT.DAT; not running in the directory in which MENUOUT.DAT is located).

WRTPAG02 - INCORRECT VALUE FOR TYPE PASSED TO ROUTINE WRTPAG

MESSAGE TYPE: ERROR

CAUSE: A menu has a type other than F (fixed) or V (variable).

PROGRAM ACTION: Help cannot be provided for the current menu. Program execution continues normally.

USER ACTION REQUIRED: Correct the error in the MENUIN.DAT file, and regenerate the MENUOUT.DAT file.

WRTREE02 - ERROR READING TREE DIRECTORY

MESSAGE TYPE: ERROR

CAUSE: The program cannot read the header record in the TREE array.

PROGRAM ACTION: The Show TREE command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: Correct the procedural error (Operating in the wrong directory; using an obsolete set of files; spelling error in ZFCNT.DAT).

WRTREE03 - ERROR READING NODP TABLE

MESSAGE TYPE: ERROR

CAUSE: The program cannot read a record in the NODP table.

PROGRAM ACTION: The Show TREE command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: Correct the procedural error (Operating in the wrong directory; using an obsolete set of files; spelling error in ZFCONT.DAT).

WRTREE04 - INVALID NUMBER OF TREES NTREE = <INTG>

MESSAGE TYPE: ERROR

CAUSE: The number of trees is less than 1 or greater than the maximum allowed.

PROGRAM ACTION: The Show TREE command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: Decrease the number of transit points which are accessible to bases or to the FEBA.

WRTREE05 - ERROR READING TREE <CHAR>

MESSAGE TYPE: ERROR

CAUSE: The program cannot read a record in the TREE array.

PROGRAM ACTION: The Show TREE command is aborted; execution continues normally from the main menu.

USER ACTION REQUIRED: Correct the procedural error (Operating in the wrong directory; using an obsolete set of files; spelling error in ZFCONT.DAT).

XTNDTRO1 - ERROR EXTENDING LLTR: SET TO <REAL> <REAL>

MESSAGE TYPE: WARNING

CAUSE: Failure to extend an LLTR properly.

PROGRAM ACTION: Extend LLTR to center of statespace and continue.

USER ACTION REQUIRED: None. Extend LLTR yourself if you don't like the results.

ZOOM--01 - BAD ZOOM SELECTION

MESSAGE TYPE: INFORMATION

CAUSE: The software does not recognize the selected zoom level.

PROGRAM ACTION: No action taken.

USER ACTION REQUIRED: Select another zoom level.

ZOOM-02 - SELECTION IS CURRENT ZOOM LEVEL

MESSAGE TYPE: INFORMATION

CAUSE: The user selected the current zoom level.

PROGRAM ACTION: No action.

USER ACTION REQUIRED: Select a different zoom level.

APPENDIX B  
STATESPACE GENERATION SAMPLE SESSION

## B.1 THREAT DATA BASE UPDATING

The initial step for mission planning is to update the threat data bases. The threat location data are processed into large arrays called the "statespaces". These arrays are summaries of the entire enemy threat laydown at multiple altitudes and for different types of aircraft. They are constructed using detailed models of threat system capability against different types of aircraft, together with a terrain masking algorithm. The statespaces are fundamental inputs to the CHAPS flight path optimization logic.

This process is done by running the SUPR program. Although threat information may come from a variety of sources, SUPR is set up to receive information from the LOCE threat reporting system. SUPR can process threat data from other intel systems such as IMOM, IPD and PAWS Constant Source, but their output files must be processed by a stand-alone processor (provided) to get the data in the proper input format for SUPR.

The LOCE processing functions within SUPR are designed to read the input threat data files, determine which threats are 'new' and add them to the statespace, and purge threats from the statespace based on rules regarding how long it has been since they were last reported.

ASCII threat files of the appropriate format can also be created manually (via the text editor). This is how the statespaces are constructed when connections to LOCE or other systems are not available.

The LOCE preprocessor is executed from the main SUPR menu by issuing the LOCE command. SUPR then asks the user the name of the file he or she wishes to process. The user then enters the name of the LOCE input file. The LOCE input file does not have to come from the LOCE system; it may be created manually. However, the file must be formatted properly and be consistent with the SUPR data base. The LOCE input file contains LOCE formatted threat reports. Each threat report contains twelve data fields on three lines. Not every field is used by the LOCE preprocessor. The data fields are:

- |                                    |   |
|------------------------------------|---|
| 1) Master Key                      | ( CHARACTER*4 )   |
| 2) Threat Type                     | ( CHARACTER*20 )  |
| 3) Last Observation Time           | ( INTEGER*6 + 'Z' )   |
| 4) Location                        | ( Latitude and Longitude as<br>DDMMSS.S + 'N' or 'S' and<br>DDMMSS.S + 'E' or 'W' ) |
| 5) Uncertainty Matrix - Major Axis | ( INTEGER*5 + 'M' - i.e. meters)<br>( or REAL*5 + 'K' - i.e. km)                    |
| 6) Uncertainty Matrix - Minor Axis | ( INTEGER*5 + 'M' - i.e. meters)<br>( or REAL*5 + 'K' - i.e. km)                    |
| 7) Uncertainty Matrix - Azimuth    | ( REAL*5, 1 DECIMAL PLACE)  |
| 8) Site Number (not used by SUPR)  | ( CHARACTER*6 )   |

- |                              |                    |                  |
|------------------------------|--------------------|------------------|
| 9) BE Number                 | (not used by SUPR) | ( CHARACTER*10 ) |
| 10) PIN Number               | (not used by SUPR) | ( CHARACTER*10 ) |
| 11) Total Correlated Reports | (not used by SUPR) | ( CHARACTER*2 )  |
| 12) Operating Frequencies    | (not used by SUPR) | ( CHARACTER*60 ) |

Each Threat Record ID should be unique.

The Threat Types will be matched against the "ELINT IDENTIFIER" fields in the TMDL table. If the Threat type does not match any Elint Identifiers, then the threat will be ignored by SUPR.

Time is in the format DAY-(INTEGER\*2), HOUR-(INTEGER\*2), MINUTE-(INTEGER\*2), followed by 'Z' for ZULU. DAY is interpreted as the day of the month. Day must be an integer between 1 and 31. The SUPR data base contains a field for the start date of threat processing. This is the IDAT field in the CURS table. This field is used to compute the actual date from the LOCE input DAY. IDAT should be set to a value several days before the current date.

Location is in Latitude/Longitude. Latitude and Longitude are both in the format Degrees/ Minutes/ Seconds/ Decimal-Seconds/ Hemisphere. Hemisphere is either North-('N') or South-('S') for Latitude, and East-('E') or West-('W') for Longitude.

The uncertainty ellipse describes the region where the threat could be located based on the accuracy of the sensor that detected it. The ellipse is described by the lengths of the major and minor axes and the orientation of the ellipse as an angle from north (in decimal degrees).

The major and minor axes may be in either meters or kilometers. The format of the data depends on which units you are using. If the data is in meters, the format is (INTEGER\*5 + 'M'). For example 10342M. If the data is in kilometers, the format is (REAL\*5 + 'K', with one decimal point). For example 321.4K.

SUPR's FORTRAN format for each record is:

Line no. 1: 1X,A4,6X,A20.1X,I6,A1,I2,I2,F4.1,A1,I3,I2,F4.1,A1

Line no. 2: 2X,I5,A1,1X,I5,A1,1X,F5.1,1X,A6,1X,A10,1X,A10,1X,A2

or 2X,F5.1,A1,1X,F5.1,A1,1X,F5.1,1X,A6,1X,A10,1X,A10,1X,A2

Line no. 3: Line 3 is not read by SUPR. If it were the format would be: 1X,A60



The normal user does not need to understand the FORTRAN formats. It is included here only for those who wish to write LOCE formatted files for input into SUPR.

#### B.1.1 Statespace Update Program (SUPR)

To provide up-to-date threat information, it is necessary to begin by running the SUPR program. The user has logged onto the computer and begins the SUPR session by typing RUN SUPR. In the following session an initial statespace will be built from scratch and an update will be made to it. The sample session will illustrate the following things:

- 1) Initialize the SUPR IDAT variable. This is necessary so that SUPR can calculate dates correctly.
- 2) Initialize or "clear" the threat data base and statespace.
- 3) Process a LOCE input file.
- 4) Update the statespace with the processed LOCE data.
- 5) Purge stale threat data.
- 6) Update the statespace with new threat data.

LOCE input files may have arbitrary names. In this sample session, the initial LOCE input file is called LOCE.DAT. The LOCE file containing new threat data is called LOCE.UPDATE. LOCE input files must be resident on the computer you are running SUPR on. Any interface or file transfer programs must be successfully executed prior to running SUPR. The contents of these files is as follows:

LOCE.DAT

E003	SQUAT EYE	020000Z502320.4N0123657.6E
700M	10M 93.0	
E015	BACK NET	020000Z492913.9N0130052.2E
1000M	1000M 0.0	
F029	BACK NET	020000Z514416.7N0125317.8E
1000M	1000M 0.0	
E098	LOW BLOW	020000Z512043.3N0122213.1E
48045M	713M 79.0	
F058	LOW BLOW	020000Z485517.3N0144744.9E
OM	OM 0.0	
F083	FAN SONG	020000Z502244.8N0153322.7E
132M	27M 110.0	
S010	STRAIGHT FLUSH	020000Z485146.8N0143336.0E
1000M	1000M 0.0	
S021	STRAIGHT FLUSH	020000Z502408.3N0105358.6E
21008M	1200M 97.0	
S041	PAT HAND	020000Z503804.9N0100626.6E
OM	OM 0.0	
S052	PAT HAND	020000Z490636.7N0141820.5E
1000M	1000M 0.0	
S058	LAND ROLL	020000Z490122.8N0151200.0E
1000M	1000M 0.0	
S066	LAND ROLL	020000Z502353.5N0105859.5E
18732M	11075M 107.3	
S033	GUN DISH	030000Z513700.1N0100548.5E
OM	OM 0.0	
S038	GUN DISH	030000Z501900.1N0120835.9E
19453M	9432M 117.3	
S043	GUN DISH	030000Z511500.4N0120713.8E
1000M	1000M 0.0	
S003	GUN DISH	030000Z511508.2N0120706.0E
1000M	1000M 0.0	
S007	GUN DISH	030000Z501937.2N0133534.8E
1000M	1000M 0.0	
S046	FLAP WHEEL	030000Z503804.9N0100626.6E

20000M	17000M	87.2	
S047	FLAP WHEEL		030000Z503156.6N0104104.2E
1000M	1000M	0.0	
S233	FLAP WHEEL		021144Z503700.1N0110548.5E
OM	OM	0.0	
S238	FLAP WHEEL		022256Z511900.1N0100835.9E
19453M	9432M	117.3	
S243	FLAP WHEEL		022306Z481500.4N0110713.8E
1000M	1000M	0.0	
S203	FLAP WHEEL		022254Z481508.2N0110706.0E
1000M	1000M	0.0	
S207	FLAP WHEEL		020922Z511937.2N0123534.8E
1000M	1000M	0.0	
S246	GUN DISH		021409Z513804.9N0130626.6E
20000M	17000M	87.2	
S247	GUN DISH		021948Z503156.6N0103104.2E
1000M	1000M	0.0	
S210	STRAIGHT FLUSH		012133Z485924.2N0142409.0E
101M	97M	93.0	
S221	SA-4		020154Z512411.3N0135356.6E
108M	20M	96.2	
S246	LAND ROLL		012209Z502704.2N0095426.9E
OM	OM	0.0	
S252	STRAIGHT FLUSH		020423Z492136.0N0132220.4E
100M	10M	0.0	
S258	LAND ROLL		012041Z492123.8N0131201.0E
132M	89M	90.0	
S266	LAND ROLL		020822Z502242.8N0103501.5E
32M	5M	107.3	

The following SUPR log shows sample user inputs and program responses after the user has logged onto the computer and entered "RUN SUPR".

ARE YOU WORKING ON THE TEKTRONIX? (Y/N)

Y

;

STATESPACE UPDATE PROGRAM (SUPR)  
DEVELOPED FOR:  
HQ USAFE/DO

DEVELOPED BY:  
SYSTEMS CONTROL TECHNOLOGY, INC.

THIS COMPUTER PROGRAM WAS DEVELOPED BY SYSTEMS CONTROL TECHNOLOGY FOR THE DEPUTY CHIEF OF STAFF/OPERATIONS, HQ USAFE. THE USE OF THE COMPUTER PROGRAM IS RESTRICTED TO AUTHORIZED AGENCIES ONLY. AUTHORIZATION FOR ANY USE OR DISTRIBUTION OF THIS SOFTWARE MUST BE OBTAINED FROM HQ USAFE/DO.

SUPR VERSION 3.9 SEPT 3, 1987

Read in previous SUPR files? (Y/N)

Y

TSTR NREC,LREC= 29 1372  
ASTR NREC,LREC= 19 10  
ALGP NREC,LREC= 2 57  
CURS NREC,LREC= 2 20  
THRT NREC,LREC= 97 38  
TMDL NREC,LREC= 19 1126  
MAS1 = 8 4 68 69  
TOBS = 2650681 1 1 1  
MASK = 1 1 123 51  
IHDR= 8. 48. 16. 54. 200 400 8 16

;

First we will change the SUPR IDAT variable to an appropriate value. The threat data we will be processing is for 2-SEP-87 and later. IDAT may be that day or a day or two before. We will set it to 1-SEP-87. This will be done using the data base change command. IDAT is in the CURS table.

SUPR MAIN : SELECT COMMAND

P. 1 OF 1

F1--DATABASE	- DATA BASE COMMANDS	(DA )
F2--UPDATE	- UPDATE THREAT SCENARIO	(UP )
F3--PURGE	- PURGE THREATS FROM SCENARIO	(PU )
F4--LOCE	- PREPROCESS LOCE INTELL DATA	(LO )
F5--SPECIAL	- SPECIAL PROGRAMMER OPTIONS	(SP )
F6--QUIT	- EXIT SUPR	(QU )

S1--HELP	:S2--NEXT PAGE	:S3--GO TO 1ST PAGE	:S4--FIND A STRING
S5--GO TO PAGE	:S6--GRAPHICS ON/OFF	:S7--MAIN MENU	:S8--MENU BACKUP

DATABASE

SUPR DATABASE: SPECIFY DATA BASE OPERATION

P. 1 OF 1

F1--DONE	- DONE WITH DATABASE OPERATIONS	( / )
F2--ADD	- ADD A RECORD TO A TABLE	(AD )
F3--DELETE	- DELETE RECORD(S) FROM A TABLE	(DE )
F4--CHANGE	- CHANGE RECORD(S) FROM A TABLE	(CH )
F5--COPY	- COPY A RECORD IN A TABLE	(CO )
F6--SHOW	- SHOW RECORD(S) OF A TABLE	(SH )
F7--WRITE	- WRITE CONTENTS OF DATABASE TO OUTPUT FILE	(WR )

S1--HELP	:S2--NEXT PAGE	:S3--GO TO 1ST PAGE	:S4--FIND A STRING
S5--GO TO PAGE	:S6--GRAPHICS ON/OFF	:S7--MAIN MENU	:S8--MENU BACKUP

CHANGE

TABLE CHANGE : SELECT TABLE YOU WISH TO CHANGE

P. 1 OF 1

F1--DONE	- DONE CHANGING RECORDS	( / )
F2--ALGP	- ALGORITHM PARAMS	(ALGP)
F3--CURS	- SUPR CURRENT STATUS	(CURS)
F4--TMDL	- THREAT MODELS	(TMDL)

S1--HELP	:S2--NEXT PAGE	:S3--GO TO 1ST PAGE	:S4--FIND A STRING
S5--GO TO PAGE	:S6--GRAPHICS ON/OFF	:S7--MAIN MENU	:S8--MENU BACKUP

CURS

RECORD CHANGE: SELECT RECORD(S) TO CHANGE IN CURS TABLE  
\* 'S INDICATE OPTIONS CHOSEN

P. 1 OF 1

F1--DONE	- HIT THIS KEY WHEN FINISHED SELECTING RECORDS	( / )
F2--ALL	- SELECT ALL RECORDS	(AL )
F3--CLEAR	- CLEAR SELECTIONS ON MENU	(CL )
F4--IF	- CONDITIONAL SELECTION CRITERIA	(IF )
F5--CURS	- SUPR-PROCESSING-STATUS	(2 )

S1--HELP	:S2--NEXT PAGE	:S3--GO TO 1ST PAGE	:S4--FIND A STRING
S5--GO TO PAGE	:S6--GRAPHICS ON/OFF	:S7--MAIN MENU	:S8--MENU BACKUP

FOR SUCCESSIVE RECORDS ENTER <RECORD > : <RECORD >

2 /

CHANGE ITEM : SELECT ITEM(S) TO CHANGE IN CURS TABLE  
CHANGING RECORD 2

P. 1 OF 2

F1--DONE	- HIT THIS KEY WHEN FINISHED SELECTING ITEMS	(/ )
F2--ALL	- CHANGE ALL ITEMS	(AL )
F3--CLEAR	- CLEAR SELECTIONS ON MENU	(CL )
F4--ID	- ID = CURS	CURS (ID )
F5--DESC	- DESCRIPTION OF RECORD	SUPR-PROCESSING-STATUS (DESC)
F6--IADD	- NUMBER OF THREATS ADDED	26 (IADD)
F7--IPRO	- STATUS OF PROC COMMAND	120 (IPRO)
F8--IDAT	- 1ST PLANNING DATE	1-JAN-87 (IDAT)

S1--HELP	:S2--NEXT PAGE	:S3--GO TO 1ST PAGE	:S4--FIND A STRING
S5--GO TO PAGE	:S6--GRAPHICS ON/OFF	:S7--MAIN MENU	:S8--MENU BACKUP

IDAT /

CHANGE SCALAR: ENTER VALUE FOR IDAT IN CURS TABLE  
ITEM IS 1ST PLANNING DATE

P. 1 OF 1

F1--DEFAULT	- DEFAULT TO CURRENT VALUE:	1-JAN-87	(. )
-------------	-----------------------------	----------	------

S1--HELP	:S2--NEXT PAGE	:S3--GO TO 1ST PAGE	:S4--FIND A STRING
S5--GO TO PAGE	:S6--GRAPHICS ON/OFF	:S7--MAIN MENU	:S8--MENU BACKUP

FORMAT (DATE): dd-mmm-yy or dd-mmm-yyyy

01-SEP-87

;  
;DBCHAN03-MSG:  
;SELECTED RECORDS IN CURS SUCCESSFULLY CHANGED  
;  
S7

Now we will purge all of the existing threat data from the threat data base and from the statespace. This is done using the PURGE command. All threats will be purged, regardless of when they were reported.

SUPR MAIN : SELECT COMMAND

P. 1 OF 1

F1--DATABASE	- DATA BASE COMMANDS	(DA )
F2--UPDATE	- UPDATE THREAT SCENARIO	(UP )
F3--PURGE	- PURGE THREATS FROM SCENARIO	(PU )
F4--LOCE	- PREPROCESS LOCE INTELL DATA	(LO )
F5--SPECIAL	- SPECIAL PROGRAMMER OPTIONS	(SP )
F6--QUIT	- EXIT SUPR	(QU )

S1--HELP	:S2--NEXT PAGE	:S3--GO TO 1ST PAGE	:S4--FIND A STRING
S5--GO TO PAGE	:S6--GRAPHICS ON/OFF	:S7--MAIN MENU	:S8--MENU BACKUP

PURGE

PURGE : EITHER SELECT A THREAT TYPE TO PURGE OR  
SPECIFY THAT ALL THREAT TYPES ARE TO BE PURGED

P. 1 OF 3

F1--ALL	- PURGE ALL THREAT TYPES	(AL )
F2--57MM GUN	- 57MM GUIDED AA GUN	(2 )
F3--ZSU-23-4	- ZSU-23-4 MOBILE AA GUN	(3 )
F4--THINSKIN	- THIN SKIN RADAR	(4 )
F5--FLATFACE	- FLAT FACE RADAR	(5 )
F6--SA-2	- SA-2/FAN SONG SAM	(6 )
F7--LONGTRAK	- LONG TRACK RADAR	(7 )
F8--SPONREST	- SPOON REST RADAR	(8 )

S1--HELP	:S2--NEXT PAGE	:S3--GO TO 1ST PAGE	:S4--FIND A STRING
S5--GO TO PAGE	:S6--GRAPHICS ON/OFF	:S7--MAIN MENU	:S8--MENU BACKUP

ALL

PURGE TIME : EITHER ENTER DATE/TIME FOR PURGING  
OBSOLETE THREATS OR SPECIFY THAT THREATS ARE  
TO BE PURGED REGARDLESS OF OBSOLESCENCE

P. 1 OF 1

F1--WHENEVER	- PURGE THREATS REGARDLESS OF LAST REPORT TIME	(WH )
--------------	--	-------

S1--HELP	:S2--NEXT PAGE	:S3--GO TO 1ST PAGE	:S4--FIND A STRING
S5--GO TO PAGE	:S6--GRAPHICS ON/OFF	:S7--MAIN MENU	:S8--MENU BACKUP

DATE/TIME SPECIFIES DAY OF MONTH, HOURS, MINUTES (ZULU); AND MUST  
CONSIST OF EXACTLY 6 DIGITS WITH NO SPACES: ddhhmm (example: 071200)  
WHENEVER

```
;
; STATES01-MSG:
; *****
; STATES "IN" EXECUTING
;
;
; STATES02-MSG:
; CLEARING MASN TO 1.550E-04
```

```

;
;
;STCLER01-MSG:
; CLEARING STATESPACE FILE: MAS1
;
;
;STATES01-MSG:
; *****
;          STATES "IN" EXECUTING
;
;
;STATES02-MSG:
; CLEARING TOBS TO 0.000E+00
;
;
;PURGE-02-MSG:
; 96 THREATS WERE SUCCESSFULLY PURGED
;

```

Now we will process the initial threat update. This data is contained in the file LOCE.DAT.

```

SUPR MAIN      : SELECT COMMAND                                P. 1 OF 1
-----+-----+-----+-----+
F1--DATABASE   - DATA BASE COMMANDS                          (DA )
F2--UPDATE     - UPDATE THREAT SCENARIO                        (UP )
F3--PURGE      - PURGE THREATS FROM SCENARIO                    (PU )
F4--LOCE       - PREPROCESS LOCE INTELL DATA                  (LO )
F5--SPECIAL    - SPECIAL PROGRAMMER OPTIONS                    (SP )
F6--QUIT       - EXIT SUPR                                      (QU )
-----+-----+-----+-----+
S1--HELP       :S2--NEXT PAGE          :S3--GO TO 1ST PAGE :S4--FIND A STRING
S5--GO TO PAGE :S6--GRAPHICS ON/OFF:S7--MAIN MENU      :S8--MENU BACKUP
-----+-----+-----+-----+
LOCE

```



```

INPUT FILE      : ENTER NAME FOR LOCE      INPUT FILE      P.  1 OF  1
-----+-----+-----+-----+-----+
F1--DEFAULT      - READ FROM DEFAULT: LOCE.DAT      ( .  )
-----+-----+-----+-----+
S1--HELP          :S2--NEXT PAGE          :S3--GO TO 1ST PAGE :S4--FIND A STRING
S5--GO TO PAGE    :S6--GRAPHICS ON/OFF:S7--MAIN MENU    :S8--MENU BACKUP
-----+-----+-----+-----+
LOCE.DAT

```

```

;
;PREPRO04-MSG:
;PREPROCESSING COMPLETED --      18 NEW THREATS
;                                1 REDUNDANT REPORTS
;                                0 MAJOR CHANGES
;                                0 MINOR CHANGES
;

```

The LOCE preprocessor has determined that one of the threat reports was redundant. In this example, threats S0437 and S0032 are very close together and were correlated together. This will happen frequently and is completely normal. The next step is to update the statespace with the new threat data. This is done using the UPDATE command.

```

SUPR MAIN      : SELECT COMMAND      P.  1 OF  1
-----+-----+-----+-----+
F1--DATABASE      - DATA BASE COMMANDS      (DA  )
F2--UPDATE        - UPDATE THREAT SCENARIO    (UP  )
F3--PURGE         - PURGE THREATS FROM SCENARIO (PU  )
F4--LOCE          - PREPROCESS LOCE INTELL DATA (LO  )
F5--SPECIAL       - SPECIAL PROGRAMMER OPTIONS (SP  )
F6--QUIT          - EXIT SUPR                (QU  )
-----+-----+-----+-----+
S1--HELP          :S2--NEXT PAGE          :S3--GO TO 1ST PAGE :S4--FIND A STRING
S5--GO TO PAGE    :S6--GRAPHICS ON/OFF:S7--MAIN MENU    :S8--MENU BACKUP
-----+-----+-----+-----+
UPDATE

```

```

;
;STATES01-MSG:
; *****
;          STATES "MA" EXECUTING
;
;  RMAX,IDTH,ILXT,IUXT,JLXT,JUXT=   51.23   E003   28   52   21   45
;
;STATES04-MSG:
;  STATE MA  E003      TOBS
;  CPUTIM,WALLTIM,PAGEFLTS=   39.000   71.869  2769.000
;
;
;STATES01-MSG:
; *****
;          STATES "AD" EXECUTING
;

```

```

RMAX, IDTH, ILXT, IUXT, JLXT, JUXT= 51.23 E003 28 52 21 45
;
; STATES04-MSG:
; STATE AD E003 MAS1
; CPUTIM, WALLTIM, PAGEFLTS= 3.210 5.641 179.000
;
.
.
.
;
; STATES01-MSG:
; *****
; STATES "MA" EXECUTING
;
;
; STATES04-MSG:
; STATE MA S047 TOBS
; CPUTIM, WALLTIM, PAGEFLTS= 0.010 0.051 0.000
;
;
; STATES01-MSG:
; *****
; STATES "AD" EXECUTING
;
;
; STATES04-MSG:
; STATE AD S047 MAS1
; CPUTIM, WALLTIM, PAGEFLTS= 0.390 1.621 0.000
;
;
; UPDATE01-MSG:
; UPDATE FINISHED: 0 THREATS DELETED
; 18 THREATS ADDED
;
;

```

The initial 18 threats are now in the statespace. This statespace may be considered the first day's statespace. The planner or planners may now exit SUPR and run CHAPS. The remainder of this sample SUPR session shows how to maintain the statespace by purging old threats and processing new update files.

The user may now exit SUPR using the QUIT command. When it is necessary to update the statespace he or she must run SUPR again and open the files as at the beginning of this session. Here, we will assume that this has already been done.

Now suppose that it is 12:00 on 4-SEP-87. Much of the threat data in the statespace is now stale and a new LOCE file called LOCE.UPDATE is ready to be input. First we will use the PURGE command to remove all stale threats. In this example, the dwell time for mobile SAMS is 24 hours. It is 12 hours for AAA threats. All threat reports which are older than two dwell times will be deleted by the PURGE command.

```

SUPR MAIN      :  SELECT COMMAND                                P.   1 OF   1
-----+-----+-----+-----+
F1--DATABASE   -  DATA BASE COMMANDS                        (DA  )
F2--UPDATE     -  UPDATE THREAT SCENARIO                     (UP  )
F3--PURGE      -  PURGE THREATS FROM SCENARIO                 (PU  )
F4--LOCE       -  PREPROCESS LOCE INTELL DATA                (LO  )
F5--SPECIAL    -  SPECIAL PROGRAMMER OPTIONS                  (SP  )
F6--QUIT       -  EXIT SUPR                                    (QU  )
-----+-----+-----+-----+
S1--HELP       :S2--NEXT PAGE      :S3--GO TO 1ST PAGE :S4--FIND A STRING
S5--GO TO PAGE :S6--GRAPHICS ON/OFF:S7--MAIN MENU   :S8--MENU BACKUP
-----+-----+-----+-----+
PURGE

```

```

PURGE          :  EITHER SELECT A THREAT TYPE TO PURGE OR    P.   1 OF   3
SPECIFY THAT ALL THREAT TYPES ARE TO BE PURGED
-----+-----+-----+-----+
F1--ALL        -  PURGE ALL THREAT TYPES                      (AL  )
F2--57MM GUN   -  57MM GUIDED AA GUN                          (2   )
F3--ZSU-23-4   -  ZSU-23-4 MOBILE AA GUN                      (3   )
F4--THINSKIN   -  THIN SKIN RADAR                             (4   )
F5--FLATFACE   -  FLAT FACE RADAR                             (5   )
F6--SA-2       -  SA-2/FAN SONG SAM                           (6   )
F7--LONGTRAK   -  LONG TRACK RADAR                            (7   )
F8--SPONREST   -  SPOON REST RADAR                            (8   )
-----+-----+-----+-----+
S1--HELP       :S2--NEXT PAGE      :S3--GO TO 1ST PAGE :S4--FIND A STRING
S5--GO TO PAGE :S6--GRAPHICS ON/OFF:S7--MAIN MENU   :S8--MENU BACKUP
-----+-----+-----+-----+
ALL

```

```

PURGE TIME     :  EITHER ENTER DATE/TIME FOR PURGING        P.   1 OF   1
OBSOLETE THREATS OR SPECIFY THAT THREATS ARE
TO BE PURGED REGARDLESS OF OBSOLESCENCE
-----+-----+-----+-----+
F1--WHENEVER   -  PURGE THREATS REGARDLESS OF LAST REPORT TIME (WH  )
-----+-----+-----+-----+
S1--HELP       :S2--NEXT PAGE      :S3--GO TO 1ST PAGE :S4--FIND A STRING
S5--GO TO PAGE :S6--GRAPHICS ON/OFF:S7--MAIN MENU   :S8--MENU BACKUP
-----+-----+-----+-----+
;

```

```

DATE/TIME SPECIFIES DAY OF MONTH, HOURS, MINUTES (ZULU); AND MUST
CONSIST OF EXACTLY 6 DIGITS WITH NO SPACES: ddhhmm (example: 071200)
041200

```

```

;
; STATES01-MSG:
; *****
;          STATES "DE" EXECUTING
;
; RMAX,IDTH,ILXT,IUXT,JLXT,JUXT=  18.50   S010   52   61   8   17
;

```

```
; STATES04-MSG:
; STATE DE S010 MAS1
; CPUTIM,WALLTIM,PAGEFLTS= 0.590 1.281 45.000
;
```

```
; STATES01-MSG:
; *****
; STATES "DE" EXECUTING
;
```

```
; STATES04-MSG:
; STATE DE S047 MAS1
; CPUTIM,WALLTIM,PAGEFLTS= 0.390 1.227 5.000
;
```

```
; PURGE-02-MSG:
; 12 THREATS WERE SUCCESSFULLY PURGED
;
```

In this example, all of the mobile SAMS and the AAA threats have been purged. The six fixed sites have not been purged.

We will now process the LOCE.UPDATE file and incorporate the new data into the statespace.

```
      SUPR MAIN      :  SELECT COMMAND                                P.  1 OF  1
-----+-----+-----+-----+
F1--DATABASE      -  DATA BASE COMMANDS                          (DA )
F2--UPDATE        -  UPDATE THREAT SCENARIO                       (UP )
F3--PURGE         -  PURGE THREATS FROM SCENARIO                  (PU )
F4--LOCE          -  PREPROCESS LOCE INTELL DATA                 (LO )
F5--SPECIAL       -  SPECIAL PROGRAMMER OPTIONS                   (SP )
F6--QUIT          -  EXIT SUPR                                     (QU )
-----+-----+-----+-----+
S1--HELP          :S2--NEXT PAGE      :S3--GO TO 1ST PAGE :S4--FIND A STRING
S5--GO TO PAGE    :S6--GRAPHICS ON/OFF:S7--MAIN MENU      :S8--MENU BACKUP
-----+-----+-----+-----+
LOCE
```

```

      INPUT FILE      :   ENTER NAME FOR LOCE      INPUT FILE      P.    1 OF    1
-----+-----+-----+-----+-----+-----+-----+-----+-----+
F1--DEFAULT          - READ FROM DEFAULT: LOCE.DAT                      ( .    )

```

```

S1--HELP              :S2--NEXT PAGE              :S3--GO TO 1ST PAGE :S4--FIND A STRING
S5--GO TO PAGE        :S6--GRAPHICS ON/OFF:S7--MAIN MENU   :S8--MENU BACKUP

```

```

LOCE.UPDATE

```

```

;
;PREPRO04-MSG:
;PREPROCESSING COMPLETED --      12 NEW THREATS
;                                  1 REDUNDANT REPORTS
;                                  0 MAJOR CHANGES
;                                  0 MINOR CHANGES
;

```

```

      SUPR MAIN       :   SELECT COMMAND              P.    1 OF    1
-----+-----+-----+-----+-----+-----+-----+-----+-----+
F1--DATABASE          - DATA BASE COMMANDS                      (DA   )
F2--UPDATE            - UPDATE THREAT SCENARIO                  (UP   )
F3--PURGE             - PURGE THREATS FROM SCENARIO              (PU   )
F4--LOCE              - PREPROCESS LOCE INTELL DATA             (LO   )
F5--SPECIAL          - SPECIAL PROGRAMMER OPTIONS                (SP   )
F6--QUIT              - EXIT SUPR                                (QU   )

```

```

S1--HELP              :S2--NEXT PAGE              :S3--GO TO 1ST PAGE :S4--FIND A STRING
S5--GO TO PAGE        :S6--GRAPHICS ON/OFF:S7--MAIN MENU   :S8--MENU BACKUP

```

```

UPDATE

```

```

;
;STATES01-MSG:
; *****
;          STATES "MA" EXECUTING
;
;
;STATES04-MSG:
; STATE MA  S233      TOBS
;  CPUTIM,WALLTIM,PAGEFLTS=      0.030      0.059      0.000
;
;

```

```

;STATES01-MSG:
; *****
;          STATES "AD" EXECUTING
;
;

```

```

;STATES01-MSG:

```

```

; *****
;           STATES "AD" EXECUTING
;
; STATES04-MSG:
; STATE AD  S266      MAS1
; CPUTIM,WALLTIM,PAGEFLTS=      0.300      0.660      93.000
;
;
; UPDATE01-MSG:
; UPDATE FINISHED:      0 THREATS DELETED
;                   12 THREATS ADDED
;
;

```

This completes the update for 4-SEP-87. The user may now exit SUPR using the QUIT command and run CHAPS.

```

SUPR MAIN      :  SELECT COMMAND                                P.   1 OF   1
-----+-----+-----+-----+-----+-----+-----+-----+
F1--DATABASE   -  DATA BASE COMMANDS                        (DA  )
F2--UPDATE     -  UPDATE THREAT SCENARIO                     (UP  )
F3--PURGE      -  PURGE THREATS FROM SCENARIO                (PU  )
F4--LOCE       -  PREPROCESS LOCE INTELL DATA                (LO  )
F5--SPECIAL    -  SPECIAL PROGRAMMER OPTIONS                  (SP  )
F6--QUIT       -  EXIT SUPR                                   (QU  )
-----+-----+-----+-----+-----+-----+
S1--HELP       :S2--NEXT PAGE           :S3--GO TO 1ST PAGE :S4--FIND A STRING
S5--GO TO PAGE :S6--GRAPHICS ON/OFF:S7--MAIN MENU       :S8--MENU BACKUP
-----+-----+-----+-----+-----+-----+
QUIT

```

NOTE: This simple sample session only involves eighteen threats. This small number was used in order to make the example easy to follow. More realistic scenarios will involve many more threats.